



## COURSE CATALOG 2014-2015



## **General Contact Info**

### **Three Rivers Campus**

574 New London Turnpike Norwich, CT 06360-6598

## Main number (860) 215-9000

## **Off-Campus Centers/Locations**

Naval Submarine Base Building 83 Groton, CT 06349 860-445-5575

## TRCC Web Site www.threerivers.edu

**Online Information Services** http://my.commnet.edu

E-mail: Info3Rivers@trcc.commnet.edu

### **TRCC on Facebook**

www.facebook.com/ThreeRiversCC



**TRCC on Twitter** http://twitter.com/3RiversCC

## Directory

Please call for office hours	
Informational Services (860)	215-9000
Accounting Office	215-9280
Admissions Information	215-9020
Advising & Counseling	215-9017
Assessment of Prior Learning	215-9018
Bookstore	887-6842
Career Services	215-9302
Cashier	215-9026
Continuing Education Office	215-9028
Disability Services	215-9017
Financial Aid Office	215-9040
Health and Wellness Center	215-9047
Library	215-9051
Lost and Found/Security	215-9053
Registrar's Office	215-9064

Student Programs Office	215-9074
Sub Base Site	445-5575
Veteran's Office	215-9235

## **Fax Numbers**

Academic Division	(860) 215-9900
Admissions Office	215-9902
Business Office	215-9901
Cashier's Office	215-9904
Registrar's Office	215-9919
Student Programs Office	215-9920
Student Services Center	215-9902
Sub Base	445-9186
Workforce and	
Community Education	215-9905



## **TRCC DEPARTMENTS**

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## **Apply Today!**

Fill out the application on page 211 or visit Www.threerivers.edu and click on "Apply Online"

## FALL 2014

Last Day to Submit Incomplete Work from Spring '14	
and Summer'1/1 Semesters	

			and Summer '14 Semesters
Aug 21	New Student Orientation	Nov 6	First Day of Third 5 Week (Tuesday & Thursday) Mod
Aug 25	Last Day for Full Tuition Refund		Session
5	Professional Day	Nov 10	First Day of Third 5 Week (Monday & Wednesday) Mod
Aug 26	Classes Begin/Late Registration Begins		Session
5	Add/Drop Period Begins	Nov 11	Veteran's Day Observed – College Open Classes Not In
	First Day of First 7 – Week Mod Session		Session
	First Day of First 5 – Week Mod Session	Nov 15	Last day to apply for Spring Graduation (May '15 and
Sep 1	Labor Day - College Closed		for Summer (August '15)
Sep 2	Instructor Signature Required to Add Classes	Nov 17	Non Degree-Seeking and New Student Registration
Sep 3	Convocation		for Winter Intersession and Spring Semester
Sep 8	Last Day of Add/Drop and Partial Tuition Refund for	Nov 26	Make-up/Supplemental sessions - Instructor Discretion
och o	15 Week Session	Nov 27-30	Thanksgiving Recess – No Classes in Session
Sep 17	Constitution Day – Classes In Session	Nov 28	Student Online Course Evaluations Closed for Student
Sep 23	Last Day to Select Audit Option for 15 Week Session		Input
Sep 25 Sep 25	Last Day of First 5 Week (Tuesday & Thursday) Mod	Dec 8	Last Day to Withdraw from classes
5cp 25	Session		Last Day of Second 7 Week (Monday & Wednesday)
Sep 30	First Day of Second 5 Week (Tuesday & Thursday)		Mod Session
5cp 50	Mod Sessions	Dec 9	Last Day of Second 7 Week (Tuesday & Thursday) Mod
Oct 1	Last Day of First 5 Week (Monday & Wednesday) Mod		Session
	Sessions	Dec 15	Last Day of 15 Week Session
Oct 2	First Day of Second 5 Week (Tuesday & Thursday)		Last Day of Third 5 Week (Monday & Wednesday) Mod
0012	Mod Session		Session
Oct 6	First Day of Second 5 Week (Monday & Wednesday)	Dec 16	Last Day of Third 5 Week (Tuesday & Thursday) Mod
000	Mod Session		Session
Oct 9	Last Day of First 7 Week (Monday & Wednesday) Mod	Dec 16-17	Makeup/Supplemental sessions – Instructor Discretion
	Session	Dec 19	Final Grades Due Registrar's Office
Oct 13	Columbus Day Observed – Classes In Session	Dec 25	Holiday - College Closed
Oct 14	Last Day of First 7 Week (Tuesday & Thursday) Mod	Dec 29	Grades available on web
	Session		
Oct 15	Last Day of First 7 Week (Monday & Wednesday) Mod	FALL 2014	
	Session	FALL 2014	MODULAR COURSES
Oct 16	First Day of Second 7 Week (Tuesday & Thursday)		
	Mod Session	SEVEN WE	EK – MOD 1
Oct 20	First Day of Second 7 Week (Monday & Wednesday)	Aug 21	New Student Orientation
	Mod Session	Aug 25	Last Day to drop classes for a full tuition refund
Oct 22	First Day of Second 7 Week (Monday & Wednesday)	Aug 25 Aug 26	First Day of Class for Tuesday & Thursday Classes
	Mod Session	Aug 20 Aug 27	First day of Class for Monday & Wednesday Classes
Oct 30	Last Day of Second 5 Week (Tuesday & Thursday)	-	Instructor Signature Required to Add Classes (TR)
	Mod Session	Aug 28	Last Day for a Partial Tuition Refund
Nov 3	Continuing Degree-Seeking Student Registration for	Sep 1	-
	Winter Intersession and Spring Semester	C 2	Instructor Signature Required to Add Classes (MW)
	Student Online Course Evaluations Open for	Sep 3	Last Day to Select Audit Option
	completion	Sep 22	Student Online Course Evaluations Opened for
Nov 4	Last Day of Second 5 Week (Tuesday & Thursday)		completion
	Mod Session.	0.110	Last Day to Select Pass/Fail Option
Nov 5	Last Day of Second 5 Week (Monday & Wednesday)	Oct 3	Student Online Course Evaluations Closed
	Mod Session	Oct 7	Last Day to Withdraw from classes
	Last Day to Select Pass/Fail Option for 15 Week Session	Oct 9	Last Day of Class for Tuesday & Thursday Classes
		Oct 15	Last Day of Class for Monday & Wednesday Classes

#### **SEVEN WEEK - MOD 2**

FIVE	WEEK	- MOD 3

Oct 15	Last Day to drop classes for a full tuition refund
Oct 16	First day of Class for Tuesday & Thursday Classes
Oct 20	First Day of Class for Monday & Wednesday Classes
Oct 17	Instructor Signature Required to Add Tuesday &
	Thursday Classes
Oct 21	Instructor Signature Required to Add Monday &
	Wednesday Classes
Oct 22	Last Day for a Partial Tuition Refund
Oct 24	Last Day to Select Audit Option
Nov 12	Last Day to Select Pass/Fail Option
Nov 17	Student Online Course Evaluations Opened for
	completion
Dec 5	Student Online Course Evaluations Closed
Dec 3	Last Day to Withdraw from classes
Dec 8	Last Day of Class for Monday & Wednesday Classes
Dec 9	Last day of Class for Tuesday & Thursday Classes

#### FIVE WEEK - MOD 1

Aug 21	New Student Orientation
Aug 25	Last Day to drop classes for a full tuition refund
Aug 26	First day of Class for Tuesday & Thursday Classes
Aug 27	First Day of Class for Monday & Wednesday Classes
Aug 28	Instructor Signature Required to Add Classes
Sep 1	Labor Day– College Closed
	Last Day for a Partial Refund
Sep 2	Last Day to Select Audit Option
Sep 15	Last Day to Select Pass/Fail Option
	Student Online Course Evaluations Opened for
	completion
Sep 24	Last Day to Withdraw from classes
	Student Online Course Evaluations Closed for
	Student Input
Sep 25	Last Day of Class for Tuesday & Thursday Classes
Oct 1	Last day of Class for Monday & Wednesday Classes
	MODA
FIVE WEEK	
Oct 1	Last Day to drop classes for a full tuition refund
Oct 1 Oct 2	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes
Oct 1 Oct 2 Oct 6	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes
Oct 1 Oct 2 Oct 6 Oct 7	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes
Oct 1 Oct 2 Oct 6	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8 Oct 21 Oct 22	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion Last Day to Withdraw from classes
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8 Oct 21 Oct 22	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion Last Day to Withdraw from classes Student Online Course Evaluations Closed for
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8 Oct 21 Oct 22 Oct 30	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion Last Day to Withdraw from classes Student Online Course Evaluations Closed for Student Input
Oct 1 Oct 2 Oct 6 Oct 7 Oct 8 Oct 21 Oct 22	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Instructor Signature Required to Add Classes Last Day for a Partial Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion Last Day to Withdraw from classes Student Online Course Evaluations Closed for

Nov 5	Last Day to drop classes for a full tuition refund
Nov 6	First day of Class for Tuesday & Thursday Classes
Nov 10	First Day of Class for Monday & Wednesday Classes
Nov 11	Veterans Day – College Open Classes Not In Session
Nov 12	Instructor Signature Required to Add Classes
	Last Day for a Partial Tuition Refund
Nov 12	Last Day to Select Audit Option
Nov 25	Last Day to Select Pass/Fail Option
Dec 3	Student Online Course Evaluations Opened for
	completion
Dec 11	Last Day to Withdraw from classes
	Student Online Course Evaluations Closed for
	Student Input
Dec 15	Last Day of Class for Monday & Wednesday Classes
Dec 16	Last day of Class for Tuesday & Thursday Classes

#### WINTER 2015 (3 WEEK SESSION)

Dec 24	Last Day for Full Tuition Refund
Dec 26	Classes Begin
Dec 30	Instructor Signature Required to Add Classes
Jan 1	New Year's Day Observed – Classes Not In Session
Jan 13	Last Day to Withdraw from classes
Jan 15	Last Day of Classes
Jan 16	Class/lab, makeup/supplemental session
Jan 20	Class/lab, makeup/supplemental session
Jan 21	Final Grades Due

### **SPRING 2015**

Jan 19	Martin Luther King Day - College Closed
Jan 20	New Student Orientation
Jan 21	Professional Day
	Last Day for Full Tuition Refund
Jan 22	Classes Begin/Late Registration Begins
	Add/Drop Period Begins
	First Day of First 5 Week (Tuesday & Thursday) Mod
	Session
	First Day of First 7 Week (Tuesday & Thursday) Mod
	Session
Jan 26	First Day of First 7 Week (Monday & Wednesday)
	Mod Session
Jan 28	Instructor Signature Required to Add Classes
Feb 4	Last Day of Add/Drop and Partial Tuition Refund
Feb 5	All College Professional Day – Classes Not In Session
Feb 12	Lincoln's Birthday - Classes In Session
Feb 16	President's Day Observed – College Open Classes
	Not in Session
Feb 18	Last Day to Select Audit Option
Feb 26	Last Day First 5 Week (Tuesday & Thursday) Mod Session

Mar 2	Last Day of First 5 Week (Monday & Wednesday) Mod Session	SPRING 2
Mar 3	First Day of Second 5 Week (Tuesday & Thursday) Mod Session	<b>SEVEN W</b> I Jan 21
Mar 4	First Day of Second 5 Week (Monday & Wednesday)	Jan 22
	Mod Session	Jan 26
Mar 10	Last Day of First 7 Week (Tuesday & Thursday) Mod	Jan 27
ividi 10	Session	Jan 28
Mar 23	Last Day of First 7 Week (Monday & Wednesday) Mod	Jan 30
	Session	Feb 18
Mar 13	Last Day to apply for Summer 2015 graduation	Feb 27
Mar 15-22	Spring Break - Classes Not in Session	
Mar 30	First Day of Second 7 Week (Monday & Wednesday) Mod Session	Mar 10
Mar 31	First Day of Second 7 Week (Tuesday & Thursday)	Mar 9
	Mod Session	Mar 10
Apr 1	Continuing Degree-Seeking Student Registration for Summer Session and Fall Semester	Mar 23
Apr 6	Student Online Course Evaluations Open for	SEVEN W
, ip: 0	completion 15 week Session	Mar 29
Apr 8	Last Day to Select Pass/Fail Option – 15 Week Session	Mar 30
	Last Day to Submit Incomplete Work from Fall '14	Mar 31
	semester and Intersession '14.	Apr 1
Apr 9	Last Day of Second 5 Week (Tuesday & Thursday)	Apr 3
	Mod Session	Apr 7
Apr 10-12	Spring Recess – College Closed	Apr 27
Apr 13	Last Day of Second 5 Week (Monday & Wednesday) Mod Session	
Apr 14	First Day of Third 5 Week (Tuesday & Thursday) Mod Session	May 7
	Non-Degree Seeking and New Student Registration	May 12
	for Summer Session and Fall Semester	May 13
	Last Day to Apply for Summer (August '15) Graduation	May 14
Apr 15	First Day Third 5 Week (Tuesday & Thursday) Mod	
	Session	FIVE WEE
Apr 24	Student Online Course Evaluations Closed for	Jan 21 Jan 22
	Student Input 15 Week Session	Jan 26
May 11	Last Day to Withdraw from Classes	Jan 28
May 13	Last Day Second 7 Week (Monday & Wednesday) Mod Session	
May 14	Last Day Second 7 Week (Tuesday & Thursday) Mod Session	Feb 18
May 18	Last Day of 15 Week Session	Feb 11
	Last Day of Third 5 Week (Monday & Wednesday) Mod Session	Feb 24
May 19-20	Mod Session Make-up/Supplemental session - Instructor Discretion	
May 19-20 May 22	Final Grades Due	Feb 26
May 25	Memorial Day - College Closed	Mar 2
May 30	Commencement Student grades available on Web	

#### SPRING 2015 MODULAR COURSES

### VEEK - MOD 1

Jan 21	Last Day to drop classes for a full tuition refund
Jan 22	First day of Class for Tuesday & Thursday Classes
Jan 26	First Day of Class for Monday & Wednesday Classes
Jan 27	Instructor Signature Required to Add Classes
Jan 28	Last Day for a Partial Tuition Refund
Jan 30	Last Day to Select Audit Option
Feb 18	Last Day to Select Pass/Fail Option
Feb 27	Student Online Course Evaluations Opened for completion
Mar 10	Student Online Course Evaluations Closed for
	Student Input
Mar 9	Last Day to Withdraw from classes
Mar 10	Last day of Class for Tuesday & Thursday Classes
Mar 23	Last Day of Class for Monday & Wednesday Classes
SEVEN WEE	EK - MOD 2
Mar 29	Last Day to drop classes for a full tuition refund
Mar 30	First Day of Class for Monday & Wednesday Classes
Mar 31	First day of Class for Tuesday & Thursday Classes
Apr 1	Instructor Signature Required to Add Classes
Apr 3	Last Day for a Partial Refund
Apr 7	Last Day to Select Audit Option
Apr 27	Last Day to Select Pass/Fail Option
	Student Online Course Evaluations Opened for
	completion
May 7	Student Online Course Evaluations Closed for
	Student Input
May 12	Last Day to Withdraw from classes
May 13	Last Day of Class for Monday & Wednesday Classes
May 14	Last day of Class for Tuesday & Thursday Classes
<b>FIVE WEEK</b>	– MOD 1
Jan 21	Last Day to drop classes for a full tuition refund
Jan 22	First day of Class for Tuesday & Thursday Classes
Jan 26	First Day of Class for Monday & Wednesday Classes
Jan 28	Last Day for a Partial Refund
	Last Day to Select Audit Option
Feb 18	Student Online Course Evaluations Opened for completion
Feb 11	Last Day to Select Pass/Fail Option
Feb 24	Last Day to Withdraw from classes
	Student Online Course Evaluations Closed for
	Student Input
Feb 26	Last day of Class for Tuesday & Thursday Classes

#### FIVE WEEK - MOD 2

FIVE WEEK		
Mar 2	Last Day to drop classes for a full tuition refund	
Mar 3	First day of Class for Tuesday & Thursday Classes	
Mar 4	First Day of Class for Monday & Wednesday Classes	
Mar 9	Last Day for a Partial Refund	
	Last Day to Select Audit Option	
Mar 30	Last Day to Select Pass/Fail Option	
Apr 1	Student Online Course Evaluations Opened for	
	completion	
Apr 8	Last Day to Withdraw from classes	
	Student Online Course Evaluations Closed for	
	Student Input	
Apr 9	Last day of Class for Tuesday & Thursday Classes	
Apr 13	Last Day of Class for Monday & Wednesday Classes	
<b>FIVE WEEK</b>	- MOD 3	
<b>FIVE WEEK</b> Apr 13	– <b>MOD 3</b> Last Day to drop classes for a full tuition refund	
Apr 13	Last Day to drop classes for a full tuition refund	
Apr 13 Apr 14	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes	
Apr 13 Apr 14 Apr 15	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes	
Apr 13 Apr 14 Apr 15	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Last Day for a Partial Tuition Refund	
Apr 13 Apr 14 Apr 15 Apr 20	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Last Day for a Partial Tuition Refund Last Day to Select Audit Option	
Apr 13 Apr 14 Apr 15 Apr 20 May 4	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Last Day for a Partial Tuition Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option	
Apr 13 Apr 14 Apr 15 Apr 20 May 4	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Last Day for a Partial Tuition Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for	
Apr 13 Apr 14 Apr 15 Apr 20 May 4 May 6	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Last Day for a Partial Tuition Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion	
Apr 13 Apr 14 Apr 15 Apr 20 May 4 May 6	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Last Day for a Partial Tuition Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion Last Day to Withdraw from classes	
Apr 13 Apr 14 Apr 15 Apr 20 May 4 May 6	Last Day to drop classes for a full tuition refund First day of Class for Tuesday & Thursday Classes First Day of Class for Monday & Wednesday Classes Last Day for a Partial Tuition Refund Last Day to Select Audit Option Last Day to Select Pass/Fail Option Student Online Course Evaluations Opened for completion Last Day to Withdraw from classes Student Online Course Evaluations Closed for	

## **SUMMER 2015**

#### FIRST – 7 WEEK MODULE

May 20	Last Day to Drop Classes for Full Tuition Refund
May 21	First Day of Class for Monday & Wednesday Classes
May 22	First day of Class for Tuesday & Thursday Classes
May 26	Memorial Day Observed – College Closed
Jun 4	Last Day to Select Audit Option
Jun 13	Last day to apply for fall (December "14) Graduation
Jun 23	Last Day to Select Pass/Fail Option
Jul 2	Last Day to Withdraw from Classes
Jul 4	Independence Day Observed – College Closed
Jul 8	Last Day for Tuesday/Thursday Classes
Jul 9	Last Day for Monday/Wednesday Classes
Jul 14	Final Grades Due

#### LATE START - 6 WEEK MODULE

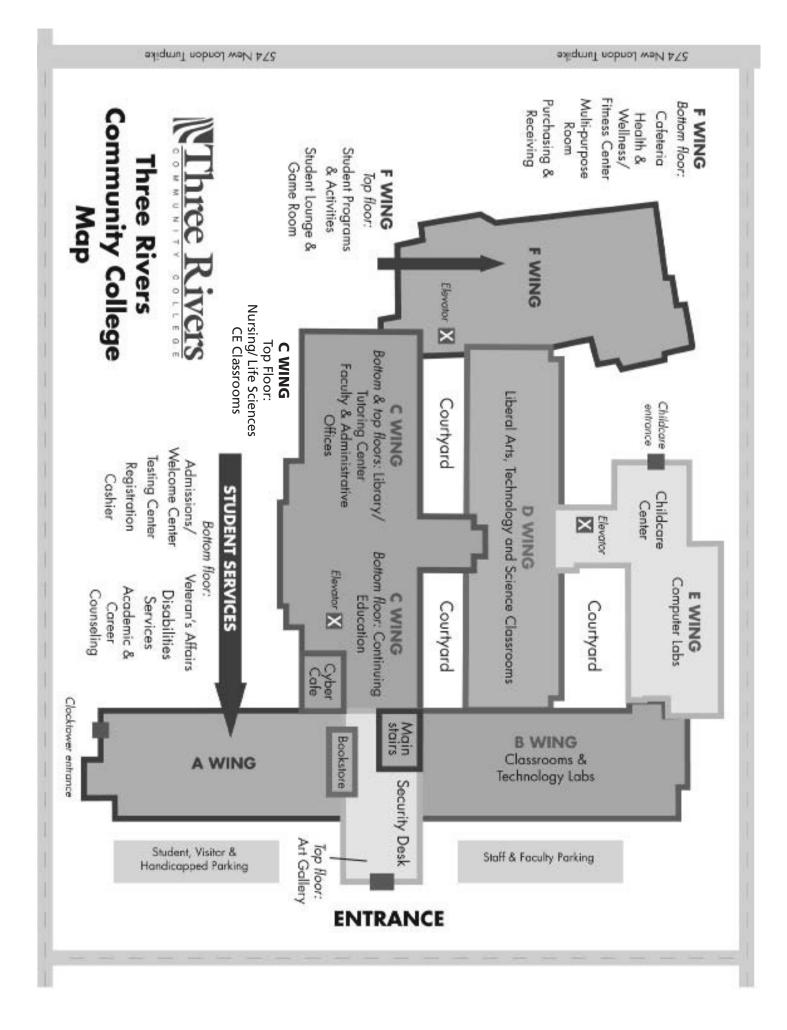
Jul 4	Independence Day Observed – College Closed
Jul 9	Last Day to Drop Classes for Full Tuition Refund
Jul 10	First day of Class for Tuesday & Thursday Classes

Jul 14	First Day of Class for Monday & Wednesday Classes	
Jul 21	Last Day to Select Audit Option	
Aug 6	Last Day to Select Pass/Fail Option	
Aug 13	Last Day to Withdraw from Classes with instructor's	
	signature	
Aug 19	Last day of Class for Tuesday & Thursday Classes	
Aug 20	Last Day of Class for Monday & Wednesday Classes	
Aug 25	Final Grades Due	
8 WEEK MODULE		

#### May 30 Last Day to Drop Classes for Full Tuition Refund Jun 2 First Day of Class for Monday & Wednesday Classes Jun 3 First day of Class for Tuesday & Thursday Classes Jun 12 Last Day to Select Audit Option Jun 13 Last day to apply for fall (December '14) Graduation Jul 4 Independence Day Observed - College Closed Jul 8 Last Day to Select Pass/Fail Option Jul 17 Last Day to Withdraw from Classes Jul 23 Last Day of Class for Monday & Wednesday Classes Jul 24 Last day of Class for Tuesday & Thursday Classes

Jul 29 Final Grades Due

**Academic Calendar** 







Congratulations on your decision to begin or continue your education with Three Rivers Community College. It is my honor, on behalf of the College, to welcome you to our new and expanding campus.

It is an exciting time for all of us here at the College. Never in the history of the College have we had so many students enrolling, pursuing their dreams of finding the right niche for their skills and talents as they prepare to enter the work force. Perhaps, too, some have enrolled to retrain themselves after choosing a different career path that will enable them to achieve success in today's economic environment.

It is also a challenging time, and Three Rivers Community College is

here, ready to help you discover what it is you excel at. I hope that you will become involved in student life as well. While you are here you will make friendships that may last your lifetime through. There are so many venues for you to explore. A true education is not just found in a classroom, but also in the college environment as a whole. Clubs, trips and activities abound and I urge you to participate.

Three Rivers offers you education, many experiences and lastly, encouragement. Use this time at Three Rivers to become the best you can be. Best wishes to you on your academic journey!

If you need further assistance, please visit the unabridged and official version of the catalog on our website (www. trcc.commnet.edu) or stop and ask a member of our College community to point you in the right direction.

and.

Dr. Grace S. Jones, President

# History of TRCC



On May 5, 1992, the Connecticut General Assembly enacted Public Act 92-126 merging the community and technical colleges in five geographic areas of Connecticut. As a result, Thames Valley State Technical College and Mohegan Community College were officially combined to form a comprehensive, publicly supported college serving the diverse educational needs of the residents of the southeastern and eastern regions of the state. In November 1992, our newly consolitional needs of the residents of the Southeastern and eastern regions of the state. In November 1992, our newly consolitional college was renamed Three Rivers Community-Technical College in recognition of the region's three primary rivers: dated college was renamed Three Rivers Community-Technical College, now called Three Rivers Community College, had the Shetucket, the Yantic, and the Thames. The commuter college, now called Three Rivers Community College, had the Shetucket, the Yantic, and the Thames Valley campus and the Mohegan campus which have been consoliconsisted of two campuses in Norwich, the Thames Valley campus and the Mohegan campus which have been consolicated as of December 2008 at the 574 New London Turnpike (Thames campus) address. The college has two off-campus instructional centers located at the Naval Submarine Base, and the Ella T. Grasso Southeastern Regional Vocational

Technical School in Groton. Through the integration of technical, career, and liberal arts programs within the College, Three Rivers' students are now able to move with greater ease from one program to another. More than 4,000 full- and part-time students in credit programs and 2,300 students in non-credit continuing education programs enroll each year at Three Rivers.

### **Associate Degree Programs**

Accounting Career (A07) Accounting Transfer (A09) Architectural Design Technology (A21) Aviation Maintenance Technology (A28) **Business Administration Management (B60) Business Administration Transfer (A62) Business Information Systems (B75)** Civil Engineering Technology (A80) Computer Science Technology (B65) Construction Management Technology (B80) **Criminal Justice:** Enforcement (A02) Treatment (A04) Early Childhood Education (A46) E-Commerce (A06) Electrical Engineering Technology (B17) Engineering Science (B 18) (A College of Technology Pathway) Environmental Engineering Technology (B19) Exercise Science (A81) Finance and Banking (A97) Fire Technology and Administration (F05) General Engineering Technology (B25) General Studies (B31) Advising Tracks Connecticut State Univ. Transfer Compact Three Rivers Pre-Nursing **UNH Dental Hygiene** 

## **Certificate Programs**

Accounting (J05) Accounting Core (J37) Advertising/Public Relations (J10) Architectural Drafting Technology (J19) Basic Business Skills (K25) **Business Administration (J42) Business Administration Core (J38) Business Information Systems (J50) Business Information Systems Core (J09)** CAD (Computer-Aided Drafting) (J46) Case Management (K06) Casino Management (K02) Communication and Customer Relations (J03) **Computer Applications (J98)** Construction Management (J02) Criminal Justice (J75) Customer Service (J06) Early Childhood Education (J89) E-Commerce (J11) Environmental Health and Safety Mgmt.(K09) General Studies (J57) Graphics and Communications Arts (J23) Health Career Pathways (K55) Hotel Management (K03)

Hospitality Management: Casino Management (B68) Hotel Management (B69) Restaurant Management (B70) Human Services (B37) Laser and Fiber Optic Technology (A95) Liberal Arts and Sciences (B57) Advising Track: UCONN Guaranteed Admission Manufacturing Engineering Technology (B64) Laser Manufacturing Option (B72) Marketing (B61) Marketing Transfer (A 91) Mechanical Engineering Technology (B 62) Nuclear Engineering Technology (A 92) Nursing - Selective admissions program. Contact the Nursing Admissions Office at (860) 892-5702 for special application information. Pathway to Teaching Careers (C35) Small Business and Entrepreneurial Studies (A64) Sports and Leisure Management (A10) Technology Studies (F11) (A College of Technology Pathway) **Biomolecular Science Option (F21)** CAD (Computer-Aided Drafting) Option (F15) Electrical Option (F06) Engineering Technology Option (F12) Lean Manufacturing & Supply Chain Mgmt. Option (F20) Technology & Engineering Education Option (F13) Wastewater Option (F04) Visual Fine Arts (A60)

Laser and Fiber Optic Technology (K20) Lean Manufacturing (N13) Library Technology (J66) Manufacturing, Introduction to (Level 1) (K56) Marketing (J68) Marketing Core (J13) Networking Technology (K07) Restaurant Management (K04) Retail Management (J24) Security and Loss Prevention (J26) Small Business and Entrepreneurial Studies (J07) Supply Chain Management (N14) Surveying and Mapping Technician (J08) Sustainable Facilities Management (K57) Sustainable Landscape Ecology & Consev. Tech. (K58) Technical Writing (J04) Wastewater (N03) Wastewater Advanced (N11) Web Design and Development (K08) Women's Studies (J12)

#### NON-DEGREE PROGRAM: NON-DEGREE (Z99)

All inquiries regarding admission should be addressed to: Admissions Office Three Rivers Community College 574 New London Turnpike Norwich, Connecticut, 06360 Telephone: (860) 215-9020 admissions@trcc.commnet.edu

## **GENERAL ADMISSIONS PHILOSOPHY**

Three Rivers maintains an open admissions policy and extends the opportunity for higher education to individuals who demonstrate the motivation and maturity needed to benefit from community college instruction. The College provides educational opportunities to people regardless of age, religion, racial or ethnic background or disabilities.

The College accepts all graduates of accredited high schools, individuals who hold a General Educational Diploma (GED), mature adults who demonstrate the ability to perform academically at a college level, high school students accepted for early admission or those participating in the College Career Pathways Program.

Applications are accepted year-round for fall, spring, summer and winter sessions and may be printed from our website. To request an Application for Admission form, interested students should contact the Admissions Office. Applications are also available at all high school guidance offices in the College's service area, and at the College's Subase Office in Groton. An Application for Admission form is also provided in the back of this catalog.

Applicants who are new to Three Rivers may also apply online. Instructions are found in the Admissions section of the College's home page at www.threerivers.edu.

Admission to the College provides access to higher education and many other academic benefits. Academic excellence necessitates adherence to a code of standards. Course placement assessments and pre-requisite courses help to maintain the integrity of the level of instruction in the classroom. Applicants who lack the necessary math or English backgrounds may be admitted with the understanding that they will take advantage of the College's developmental courses in math and English prior to pursuing the curricula of their chosen programs.

Admission to the Associate Degree in Nursing Program is selective and governed by special admissions criteria as described in the admissions section of this catalog under Connecticut Community Colleges Nursing Program.

## HOW TO APPLY TO THE COLLEGE Degree or Certificate Students

#### **1. NEW STUDENTS (FIRST TIME ATTENDING COLLEGE)**

a. Complete the Application for Admission form (provided in the back of this catalog). A \$20 non-refundable application fee is required with a completed application form. (If you have applied to another Connecticut Community College, you do not pay the fee again.) High school seniors may take the completed application and fee to their high school's guidance office to be mailed to the College.

b. Submit proof of high school completion. High school seniors should request from their guidance counselors that a copy of their current transcript be sent to TRCC to assist in course placement. The final transcript should be sent after graduation. Students may submit other evidence of high school completion such as a photocopy of the original high school diploma in lieu of official transcripts. Students who have completed the high school equivalency test should submit a copy of their GED Certificate. Once an applicant has submitted official transcripts from another school, they become the property of the College and will not be returned to the student. This applies even if the applicant does not enroll.

c. Course placement in English and math. Advisement in course placement assesses the student's basic skills in mathematics, reading and writing. Students may be required to schedule a computerized placement test or provide additional assessment criteria. Information about course placement in English and math is provided to new students at their new student **Orientation\*** appointment, provided with their acceptance letter. The acceptance letter is sent to the email address that the student provides on the Application to the College. More information on course placement is included in the Additional Admissions Information section of this catalog.

d. Submit evidence of the immunization. Connecticut State Law requires all full-time students and part-time matriculating (degree and certificate seeking) students born after 1956, and enrolled in post-secondary schools to provide proof of adequate immunization against **measles**, **mumps and rubella**; **and varicella** (chicken pox) for those born in the United States after 1979, and for all those born outside the United States. Students must have two doses of each vaccine administered at least one month apart with the first dose given on or after the first birthday. For more information on the State Immunization Policy, including exemptions from this requirement, refer to the Immunization Form in the Admissions section of the College's home page at: www.threerivers.edu.

e. Admission to the Nursing Program requires the completion of special application materials available from the Admissions Office. For details, please see the Connecticut Community Colleges Nursing Program in the Admissions section of this catalog.

f. All students must complete the admissions process before registration. Applicants are encouraged to complete the admissions and financial aid process at least 6 weeks prior to their intended first semester. After the new student orientation, new students attend a freshman advising seminar to learn more about planning their program of study and to register for classes.

#### 2.TRANSFER STUDENTS

Transfer students from another regionally accredited institution of higher education who wish to transfer credits to Three Rivers must follow the steps for new students. Transfer students may be required to take the computerized placement test or provide additional course placement criteria. *Prior College or University Students* who have earned math and/or English credits may fulfill the course placement requirement when they provide unofficial transcripts of prior coursework to an academic advisor. Unofficial transcripts or grade reports can be submitted for course placement and/or registration into higher level courses. More information on course placement is included in the Additional Admissions Information section of this catalog.

After registering for their initial semester at TRCC, degree seeking transfer students should have their official college transcripts sent to the Registrar's office for an official transfer credit evaluation and to add these courses to their TRCC transcript. This will simplify online registration.

In addition, transfer students wishing to receive credit at Three Rivers for course work completed at another college or university, by CLEP or DSST (formerly DANTES), or through the military must request that an official transcript be sent to the Registrar's Office. Once students are admitted into a degree or certificate program of study and registered for classes, their credits will be evaluated upon receipt of the official transcripts. For detailed information about receiving credit by transfer, see the General Academic Information section of this catalog.

#### **3. READMITTING STUDENTS**

Readmitting students are former Three Rivers' students who are returning to Three Rivers after an absence of at least two years (excluding summer and winter intersessions). Readmitting students must complete and submit an Application for Admission form (provided at the back of this catalog) before they are able to register for courses. An application fee is not required if paid at the time of initial application to the College. In addition, readmitting students are encouraged to contact an admissions advisor to discuss how prior course work at Three Rivers or from other colleges attended may apply to current degree requirements. Readmitting students may be required to take the computerized placement test or provide additional course placement criteria if they have not previously tested and have not completed college-level English and math courses with a "C" grade or higher. More information on course placement is included in the Additional Admissions Information section of this catalog. Readmitted students must meet the immunization requirements and must have submitted proof of high school completion as described in this catalog.

Note: Students seeking readmission who have been on academic or disciplinary suspension should refer to the General Academic Information section of this catalog.

#### **4. INTERNATIONAL STUDENTS**

Three Rivers is authorized under Federal law to enroll nonimmigrant students with a permanent residence outside of the U.S. but who wish to be in the U.S. on a temporary basis and hold an appropriate visa. Applicants for a student visa (F-1 status) should contact the Admissions Office at (860) 215-9020 for more information at least six months in advance of the semester in which they wish to enroll. All admission application procedures must be completed no later than four months in advance, including:

a. Submit a completed Application for Admission form with translated copies of a transcript or diploma that certifies high school graduation. A translation or statement of educational equivalency by an authorized official or foreign credentialing service may be necessary.

b. Take the computerized placement test (CPT) to assess basic skills in English and mathematics and demonstrate English proficiency. Three Rivers does not provide qualified intensive English as a Second Language instruction. For this reason, all international F-1 students must have sufficient proficiency in English to allow them to enroll in a full-time program at the college. The computerized placement test is administered **in person** only at Three Rivers.

Applicants who have previously attended other U.S. Colleges or universities and have earned college-level credits including English and math with a "C" grade or higher may be waived from the CPT when they provide unofficial transcripts or prior college coursework. More information on course placement is included in the Additional Admissions Information section of this catalog.

c. Submit evidence of the immunization requirements. Connecticut State Law requires all full-time students and part-time matriculating (degree and certificate seeking) students born after 1956, and enrolled in post-secondary schools to provide proof of adequate immunization against **measles**, **mumps and rubella; and varicella** (chicken pox) for those born in the United States after 1979, and for all those born outside the United States. Students must have two doses of each vaccine administered at least one month apart with the first dose given on or after the first birthday. For more information on the State Immunization Policy, including exemptions from this requirement, refer to the Immunization Form in the Admissions section of the College's home page at: www.threerivers. edu.

d. Submit proof of financial sponsorship or proof of ability to cover educational and living expenses in U.S. currency. International students are responsible for making their own housing arrangements. In addition, they must pay the out-of-state tuition and fee rate in full prior to the start of classes. They do not qualify for federal or state financial aid programs.

For more information on International Students refer to the Admissions section of the College's home page at www.three-rivers.edu.

## **Non-Degree Students**

Non-degree students are those who are taking credit courses but are not working towards a degree or certificate at Three Rivers. Persons applying as non-degree students must complete the required Application for Admission form. A \$20 nonrefundable application fee must accompany the completed application form. (The application fee will be waived if it has been submitted to another Connecticut Community College.) Non-degree students are ineligible for financial aid and some veterans' benefits.

College transcripts may be required when non-degree seeking students wish to enroll in courses that have pre-requisites. Applicants admitted as non-degree students may subsequently become degree candidates by complying with the degree seeking student requirements and completing a Program Change form available from our website or from the Admissions Office.

At Three Rivers, non-degree students generally include students pursuing credit courses for personal interest or skill development for career advancement, college students that are home for the summer, students fulfilling requirements for

## **ADMISSIONS WEBSITE:**

Visit Www.threerivers.edu and click on "Admissions" other colleges, and senior citizens.

Non-degree students may be required to take a computerized placement test or provide additional course placement criteria. Information about registering for classes is sent to new non-degree students with their acceptance letter. The acceptance letter is sent to the email address that the student provides on the Application to the College. More information on course placement is included in the Additional Admissions Information section of this catalog.

Non-degree students must provide proof of immunization when they register for 12 or more credits in a semester. For more information on the State Immunization Policy, including exemptions from this requirement, refer to the Immunization Form in the Admissions section of the College's home page at: www.threerivers.edu.

## Connecticut Community College Nursing Program

Capital Community College, Gateway Community College, Naugatuck Valley Community College, Norwalk Community College, Three Rivers Community College

Students seeking admission to the Associate Degree in Nursing program must fulfill nursing admission criteria to qualify for this selective admission program. These criteria are in addition to the general admission policies of the College.

Students accepted into the Associate Degree in Nursing Program begin in either the fall or spring semester. Meeting minimum admission requirements does not guarantee admission into the nursing program.

However, students may enter the College at any time to prepare for this program as General Studies, pre-nursing students. Prospective nursing applicants are strongly encouraged to attend a nursing information session to learn more about this selective admission program. Call Nursing Admissions at 860-892-5702 for dates and times of upcoming sessions or visit the College website at www.threerivers.edu and select the link for admissions, and then nursing admissions.

#### NURSING APPLICATION PROCESS

Applicants are required to complete a common nursing application. The nursing application is only available online and can be accessed through Banner Self Service. Applicants must have an eight-digit banner number (first eight digits of the NetID) in order to access the application. Applicants who do not have a banner number must first complete a general college application at their college of first choice and be accepted into that college before a banner number is issued.

The application period for the nursing program is November 1 - February 1 of each year. Applicants to the Connecticut Community College Nursing program (CT-CCNP) must complete the online nursing application and submit all required documentation to the Admissions Office at the **College of First Choice by the February 1, 2015 deadline. "College of First Choice"** is the college that the applicant would most like to attend.

Applicants may select a second choice college at the initial time of application which will eliminate the necessity for the applicant to apply to more than one College. An applicant should only list the college(s) to which s/he would be willing to commute. **Applicants who select Northwestern CT Community College as their first choice are required to list a**  **second choice college on their application.** (Please note: clinical sites could be within an hour radius of the college, and may require a mandatory parking fee.)

All application materials should be sent to the Admission Office at the College of First Choice and must be postmarked to the College of First Choice no later than February 1, 2015. Late applications and transcripts will not be accepted. All applications that are completed by the February 1, 2015 deadline will be reviewed; applicants will be notified prior to May 1 as to their admission status.

Advisors/Counselors are available at each college to guide applicants through the application process.

All initial communication with students will be done through email.

## **Application Requirements**

Students are required to submit the following by the **February 1, 2015** deadline:

• General College application submitted to the college of first choice (*separate from the nursing program application*) with application fee of \$20.00 for first-time applicants to any of the twelve Connecticut Community Colleges.

• Connecticut Community College Nursing Program (CT-CCNP) common application (the application is only available online).

• Proof of high school completion.

• If the student is using their high school chemistry to satisfy the admission requirement, official high school transcripts are required.

• Official SAT I score reports, if applicable (see page 6 for clarification).

• Official College/University transcripts from ALL colleges ever attended (*including all CT Community Colleges*), regardless of the age of the transcripts and applicability to the nursing program.\*

• Official TEAS V results, if **not** taken at a CT Community College.

• Proof of immunizations- consult with your college of first choice for current immunization requirements.

\* All transcripts must be final transcripts. Students taking courses in the fall semester prior to applying must submit transcripts that include their fall grades. Transcripts must be submitted regardless of the age of the transcripts and applicability to the nursing program. This includes any college credits earned while in high school, official CLEP or DSST testing results and official AP scores from advanced placement courses regardless of the score or applicability to the nursing program.

Students who have attended or are currently attending one of the twelve Connecticut Community Colleges must submit community college transcripts *from all previously attended Connecticut Community Colleges* to the College of First Choice.

A student who has received a grade of failure (F) or unsatisfactory in the clinical component of any course in a health career program is not eligible for admission into the CT-CCNP. A "health career program" is defined as any nursing or allied health program whose curriculum has both a classroom and clinical component.

## Admission Requirements

High School graduate or equivalent.

• A score of 40 or higher on the College Level Math portion of the Accuplacer; OR SAT I Math score of 550 or higher; OR a score of 22 or higher on the ACT Math test; OR Connecticut Community College MAT\*136 or 137, or equivalent or higher, with a grade of C or higher, completed prior to application deadline of February 1, 2015.

 One year of high school Chemistry with a lab or Connecticut Community College CHE\*111 or equivalent with a grade of C or higher, completed within five years prior+ to application deadline of February 1, 2015.

• A passing score on the computer proficiency test++ or completion of Connecticut Community College CSA\*105, CSA\*106 or CSC\*101 or equivalent, with a grade of C or higher, completed prior to application deadline of February 1,2015.

 Connecticut Community College ENG\*101: English Composition, or equivalent, with a grade of C or higher, completed prior to application deadline of February 1, 2015.

 Connecticut Community College BIO\*211: Anatomy and Physiology I, or equivalent, with a grade of C+ or higher, completed within five years prior+ to application deadline of February 1, 2015.

 Connecticut Community College BIO\*212: Anatomy and Physiology II, or equivalent, with a grade of C+ or higher, completed within five years prior+ to application deadline of February 1, 2015 or completed during, but no later than, the spring semester of application year.

• 2.7 GPA – based only on the college courses that meet the nursing admission and nursing program curriculum requirements.

• TEAS V score. Applicants must have an adjusted individual total score of 53.3% or higher, and must be submitted by February 1, 2015.

+ "Five years prior" is defined as having completed the course between December 2008 and February 1, 2015.

++ Please refer to page 7 for additional information on the **computer** literacy requirement.

There may be prerequisite courses that must be successfully completed prior to taking the admission requirements. Challenge exams may exist for certain admission requirements. Please consult with your College of First Choice for additional information. Students should complete the required Accuplacer computerized placement test. The placement test may be waived for students who have prior college English and/or mathematics credits or if the student has qualifying SAT/ACT scores.

## **TEAS V Standardized Admission Test for** Nursing

#### Applicants must obtain an adjusted individual total score of 53.3% or higher on the TEAS V to be considered for admission. Scores from tests taken from February 5, 2011 to the present will be accepted.

Applicants may retake the TEAS V as many times as desired. The CT-CCNP will use the applicant's highest TEAS V score

when determining eligibility.

The following Connecticut Community Colleges administer the TEAS V: Capital, Gateway, Naugatuck Valley, Northwestern CT, Norwalk, Quinebaug Valley and Three Rivers.

For testing schedules and registration information, go to www. atitesting.com/ctccteas. If the TEAS V is taken at a site other than one of the Connecticut Community Colleges, applicants must have official results sent by ATI to the College of First Choice by the application deadline.

A study manual for the TEAS V is available through www. atitesting.com. Online practice tests are also available through ATI. For additional information about the TEAS V, please visit ATI's website at www.atitesting.com.

#### FORMULA FOR COMPUTING RANKING

Eligible applicants who meet all of the application and admission requirements are assigned a rank number. Rank numbers are computed by the following formula:

> 25% = TEAS V score 25% = BIO\*211 grade 50% = GPA

#### SELECTION PROCESS: RANK, RANDOM, WAITLIST

Rank Selection (75%): All eligible applicants will be ranked by the CT-CCNP.

Each college will fill 75% of their seats by rank.

Random Selection (25%): Common pool of remaining applicants will consist of all students who were eligible for the program, but were not selected through rank selection. Stu dents will be placed on a list for their College of First Choice and will be selected for that college in random order until the college is full.

Applicants will be considered for random selection at their second choice college if that college has space that wasn't filled through its own random selection process.

Once all colleges are filled, the remaining applicants will go onto a waitlist.

Waitlist: Applicants on the waitlist will be ranked using their original CT-CCNP rank number.

The waitlist will be divided into six separate lists based on the College of First Choice. When openings occur, applicants will be selected (in rank order) from the waitlist at that college and offered the nursing seat. Applicants who refuse an offer from their college of first choice will be removed from consideration for the current academic year.

In the event that a college's initial waitlist is exhausted, applicants choosing that college as their second choice will be rank ordered and offered spaces as they become available. An applicant can refuse the offer of a space at their College of Second Choice and go back onto the waitlist at their College of First Choice.

The waitlist will not carry over from year to year. Applicants who are not selected from the waitlist will need to submit a new application if they want to be considered for admission to the nursing program the following year. Students would need to contact the Admission Office at the College of First Choice to see what application information is still on file.



## **Additional Information**

Before being permitted to participate in clinical experiences, all students must have on file a health and immunization assessment by a Healthcare Provider which documents fitness to participate in the clinical area. This is to be documented per the instructions on the Health Assessment Form (available on the College Website on the Nursing Resources Page). All students must demonstrate proof of current Basic Life Support Certification as a Healthcare Provider through the American Heart Association or the American Red Cross. Clinical experiences are provided at various community hospitals and other health care facilities within the broader Eastern Connecticut community. In addition to regular tuition and fees, nursing students incur additional expenses such as: uniforms, nursing textbooks and supplies, nursing lab fee, cost of required standardized testing and transportation to clinical settings.

Please note that all nursing courses currently use an Internet based Course Management System that requires computer access and several specific software programs. If you have questions regarding computer requirements, please call the Nursing Division office at (860)215-9301.

## **College Career Pathways Students**

College Career Pathways (CCP) is a federal dual-enrollment program that allows high school students to sample college level academic rigor while enrolled in high school, as well as earn college credit towards a future degree. Participating students enroll in a pathway of courses resulting in a college transcript from Three Rivers. The program requires students to complete a specified course in English, math, and science, as well as one or more courses in a designated career area.

There is a formal articulation agreement between Three Rivers and 24 area high schools throughout Eastern Connecticut. The pathway courses have been comprehensively reviewed by both TRCC faculty and the respective high school faculty to ensure college level academic rigor. All CCP courses are offered at the high school and taught by high school faculty. Students may receive both high school and TRCC college credit for these courses.

Up to 16 college credits may be earned by the end of the senior year of high school. A college transcript showing which credits they have earned will become available in the summer following their high school graduation. The college transcript may also be presented to other higher education institutions for possible transfer credit.

Students can apply as early as ninth grade by submitting an application form to their high school guidance offices. Forms are available with each high school's guidance office or by contacting the TRCC program coordinator. High school students interested in this program should speak with their guidance counselor, call the Three Rivers College Career Pathways Coordinator at (860) 885-2600 or visit the CCP website at: http://www.trcc.commnet.edu/div\_academics/careerpathways/careerpathways.shtml

## **Additional Admissions Information**

#### COURSE PLACEMENT

After being admitted to the college, all new first-time students may be required to complete an assessment of basic skills in mathematics, reading and writing. Assessment for course placement may be necessary to help advisors assess readiness for college-level classes and assist in selecting appropriate courses. Students then use this information to make decisions about the number of courses they will take, the sequence in which courses are taken and long-term educational planning.

#### ASSESSMENTS FOR COURSE PLACEMENT IN ENGLISH AND MATH

**1. Prior College or University Students** who have earned math and/or English credits may fulfill the course placement requirement when they provide unofficial transcripts of prior coursework to an academic advisor.

**2. All SAT and/or ACT Scores** may be considered when determining Course Placement. Please submit your scores to the Admissions Office.

**3. High School Transcript** - With the assistance of an academic advisor, students can use their current high school transcript to assist with course placement.

**4. Other Assessment Tests** - You may be required to schedule a computerized assessment test to assist with Course Placement for English and/or math.

**Note:** Degree recipient status is not an automatic exemption from pre-requisite standards.

## **First Year Experience Course**

Many of TRCC's programs of study require new and/or first-time college students to take the First Year Experience course (IDS K105) in the first or second semester of their college program, or before attaining 12 credits. This course is designed to engage students as active participants within the college environment. Students will have the opportunity to acquire academic skills, attributes, awareness of self as a learner, and to engage with the resources and activities within the Three Rivers Community College community.

## ADMISSION TO ENGLISH AS A SECOND LANGUAGE COURSES

English as a Second Language (ESL) courses at Three Rivers Community College are designed to serve the needs of nonnative speakers of English who have already attained basic fluency in English. These courses have been developed to enhance students' fluency in English.

## ADMISSION TO DEVELOPMENTAL COURSES AND COURSES WITH EMBEDDED SUPPORT

These courses are designed to help students whose academic skills need development before they take required courses in their plan of study. Students needing skill development in mathematics or English courses are required to complete specific courses determined by placement test scores prior to enrolling in college-level course work. These courses are designed to give students the foundational skills that are fundamental to successfully completing college-level courses. See ENG K002 and ENG K012, ENG K096, COU 024, MAT 075, MAT 090, MAT 095 and MAT K0951 in the Credit Course Description in this catalog.

## **Veterans and Reservists**

a. Veterans and other students eligible for Veterans Administration (VA) education benefits must complete the College's application procedures for degree or certificate programs. In addition, such students MUST contact the VA Representative, Terri DeBarros at (860) 215-9235, to complete the VA's application form. Those students who have served on active duty must also submit copies of their separation papers (DD214). Reservists eligible for the Montgomery GI Bill (Chapter 1606 & 1607) must contact the College VA Representative and supply the Notice of Basic Eligibility form in order to file for benefits.

See the Tuition and Fee Information section for specific dates and times of service to determine eligibility. Connecticut tuition waiver may apply to some veterans. You do not have to be in a degree or certificate program if you are only going to use the tuition waiver. Married veterans who are eligible for Montgomery GI Bill-Active Duty (Chapter 30) benefits and have remaining entitlement from old GI Bill (Chapter 34) benefits must have their marriage certificate and birth certificates of any children certified by either the Veterans Administration or the College VA Representative. Spouses and dependents who will be receiving transferred benefits under the Post 911 GI Bill, MUST also contact the VA Representative to complete the process.

Since Veterans Administration benefits only cover courses which do not replicate any previously earned credits, students receiving VA benefits are advised to have their official military and/or educational transcripts submitted for an evaluation of Military Learning.

b. Vocational Rehabilitation – For information, students should contact the Veterans Administration in Newington, CT at 800-827-1000

c. Veterans eligible under the new VRAP program **must** bring in their certificate of eligibility before they can be certified, and **must** be a full time student. If not eligible for the CT Tuition Waiver or Financial Aid, please be prepared to pay for classes in full.

## **Students with Disabilities**

Three Rivers Community College welcomes students with disabilities and strives to make their college experience successful. Students with documented disabilities have access to reasonable academic adjustments in accordance with all state and federal laws. Disclosure of a disability is voluntary. A confidential disabilities disclosure form is sent to all newly admitted students. Students who submit a self-disclosure form will receive a letter indicating the name and phone number of the student's disability service provider, requesting that they contact the disability service provider to arrange an appointment. Elevators are available and special parking areas and entrances are conveniently located near the elevators.

#### REGIONAL STUDENT PROGRAM OF THE NEW ENGLAND BOARD OF HIGHER EDUCATION [RSP/NEBHE]

Each New England State admits qualified out-of-state New England residents to its public, degree-granting two-year colleges providing that the students are eligible by either of the following rules:

**Rule 1:** When a degree or certificate program is not offered at an in-state institution, a qualified student may enroll at any participating out-of-state institution offering that program.

**Rule 2:** When a degree or certificate program is offered at both in-state and out-of-state institutions, and the out-of-state institution is closer in traveling time to a qualified student's legal residence, then the student may enroll out-of-state. Upon admission into a degree or certificate program at Three Rivers, qualified out-of-state students pay the in-state tuition plus a 50 percent surcharge. Additional information about the program may be obtained from the Three Rivers Admissions Office or from the New England Board of Higher Education, 45 Temple Place, Boston, MA 02111; (617) 357-9620, or from the following website:

http://www.nebhe.org/programs-overview/rsp-tuition-break/find-a-program/

## **Public Disclosure**

### Student-Right-To-Know

In compliance with the Student-Right-To-Know under the Higher Education Act of 1965 (HEA0), as amended by the Higher Education Opportunity Act of 2008 (HEOA), to inform current and prospective students and all other interested parties, reportable and disclosable information, the following link is provided below:

http://www.threerivers.edu/President/Inst\_Research/HEA. shtml

#### NOTICE OF NON-DISCRIMINATION

Three Rivers Community College does not discriminate on the basis of race, color, religious creed, age, gender, gender identity or expression, national origin, marital status, ancestry, present or past history of mental disorder, learning disability, veteran status, sexual orientation, genetic information or criminal record. The following person has been designated to handle inquiries regarding the non-discrimination policies: Equity and Diversity Officer, 574 New London Turnpike, Norwich, CT 06360. 860-215-9000.



### **REGISTRATION PROCEDURES**

All students must be admitted to the College in order to register for classes during designated registration periods before each semester. Students should go to www.threerivers.edu to see the schedule of classes and click on Register for Classes on the home page to see specific registration procedures and policies.

**New Students:** If this is the first time attending college, students will register for courses in a Freshman Advising Session after your course placement by multiple assessment. See admissions section for more details.

**Transfer and Re-admitted Students:** Transfer and readmitted students will meet with an admissions advisor before registration. Students should bring test scores, unofficial transcripts and/or grade reports of previous work to this meeting so they can register at that time. Official copies of previous transcripts should also be sent directly to the Registrar's office as soon as possible. This will allow the student to register online as prerequisite courses will be recorded at TRCC.

**Continuing Students:** Students enrolled in a degree program who have attended TRCC within the last two years can register during the early registration period; online or in-person. In a student's first semester at TRCC they are required to see their assigned advisor before registering for their second semester. All students should seek advisement whenever needed. The electronic Degree Evaluation tool at http://my.commnet.edu can also be used to assist students with course selection and graduation requirements. Times and locations for registration appear on the web with specific procedures.

**Degree Candidate (matriculated student)** - A student who is in a plan of study at Three Rivers which, upon successful completion, will result in the award of either an associate degree or a certificate of completion. Degree Candidates are eligible to apply for financial aid and qualify for early registration.

**Non-Degree (non-matriculated student)** - A student who is enrolled on a course-by-course basis and is not in a degree or certificate program at Three Rivers.

Students in either of the above classifications may register full-time (minimum of 12 credits per semester) or part-time (maximum of 11 credits per semester). All degree candidates and full time non-degree students must meet College Immunization Requirements. See admissions section for specific immunization requirements

#### AUDITING COURSES

A student who wishes to take a credit course without earning credit can register as an auditor by the fourth week in the semester. Auditors are charged regular tuition and fees but do not receive a final letter grade. Auditors attend class regularly but graded activities such as exams are limited. Audited courses are shown on a student's transcript with a grade of "AU". Students who elect to Audit cannot reverse this choice at a later point. Students are not eligible to receive financial aid, Veteran Benefits, or Tuition Assistance for audited courses. Please check the Academic Calendar for the specific Audit deadline.

### SCHEDULE CHANGES -DROPPING AND ADDING COURSES

Specific dates for semester and module courses are in the academic calendar

#### **ADDING COURSES**

Students may add courses online or in person through the first week of the semester provided there is an opening in the desired class and the student meets course prerequisites, if any.

Students must obtain written permission from the instructor to add a class in the second week of classes. Adds in the second week must be done in person.

#### **DROPPING COURSES**

Students may drop courses online or in person through the second week of the semester. Courses dropped in the add/ drop period will not appear on the student's transcript.

#### WITHDRAWING FROM COURSES

Specific dates for semester and module courses are in the academic calendar.

After the last drop date as specified in the academic calendar, students may withdraw from courses online or by completing the appropriate form which is available online or in any Student Services Office. If necessary you can withdraw by phone by calling the Registrar's Office. Withdrawals are accepted up until the week before classes end – check the specific date in the academic calendar. A grade of "W" will be entered for each course from which a student withdraws. The course(s) and grade of "W" will appear on the student's transcript.

**Note:** Failure to attend class is not an acceptable method of either dropping or withdrawing. This will result in an N grade if the instructor has no basis for a grade or a failing grade of "F" on the student's permanent transcript.

This can seriously affect future reinstatement, transfer to another college and financial aid. Non-attendance either before or after the start of classes does not cancel the financial obligation to pay fees and tuition incurred at the time of registration for classes. Students will remain liable for any outstanding payments of tuition and fees due the College.

#### REGISTRATION BETWEEN CONNECTICUT COMMUNITY COLLEGES

The Connecticut Community Colleges and the State Universities have adopted a coordinated policy that may broaden the student's education at a reduced total cost to the student.

Full-time students (those paying maximum General Fund tuition) in one Connecticut Community College, Connecticut State University or the University of Connecticut may enroll for courses at another College tuition free; if the home college does not offer the course, and if space is available at the host college which is offering the course. At Three Rivers cross registration begins two weeks before the semester begins.

• A student wishing to enroll in a host college course must complete a Three Rivers Application for Admission and present a receipt at registration to show that the maximum full-time tuition was paid at the home college. The policy does not apply to self-supporting courses in the summer session and winter intersessions. Summer Session and Winter

#### INTERSESSION REGISTRATION

The College offers day and evening self-supporting courses during the summer and winter intersession at a single tuition rate (Educational Extension Credit Program tuition rate). The College welcomes experienced students from other colleges and universities who wish to make up courses or earn advanced standing at their home institution. Credits earned at Three Rivers are generally acceptable to other colleges, but students are advised to consult their home institution for information regarding transfer of credits. Students should follow the required admission and registration procedures. Generally, students enrolling in the summer session or winter intersession are admitted with non-degree status. Three Rivers students may attend the summer session to lighten their study load during the regular academic year or to reduce the time needed to earn their degrees. Students are encouraged to check the appropriateness of their course selection with their advisors. Summer session schedules and registration information are available in early spring online at www.threerivers.edu.

### **REGISTRATION WEBSITE:**

Visit www.threerivers.edu and click on "Register for classes" Three Rivers maintains the permanent records on all students: admission, academic, and financial aid. The records are retained in accordance with the State of Connecticut retention policies and schedules. Accordingly, secondary documents are periodically purged from student files after mandated periods of retention have expired.

## STUDENTS RIGHTS UNDER THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request amendment of an education record that the student believes is inaccurate. Students may ask an appropriate College official to amend a record that they believe is inaccurate. The student should write to the College official, clearly identify the part of the record he or she wants changed, and specify why he/she believes it is inaccurate. The College will notify the student of the decision. If the College decides not to amend the record as requested by the student, the College will advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

NOTE: FERPA is not intended to provide a process to question substantive judgments that are correctly recorded. For example, the right of challenge does not allow a student to contest a grade in a course because the student believes that a higher grade should have been assigned.

3. The right to consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. FERPA permits disclosure without consent to school officials with legitimate educational interests. A "school official" includes but is not limited to the following: a person employed by the College in an administrative, supervisory, academic, research or support staff position (including law enforcement and security personnel, counseling and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, collection agent or official of the National Student Clearinghouse); a person serving on the Board of Trustees who is authorized to act on its behalf; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities.

FERPA also permits disclosure of education records without consent in connection with, but not limited to:

· to comply with a judicial order or a lawfully issued subpoena

• to appropriate parties in a health or safety emergency

• to officials of another school, upon request, in which the student seeks or intends to enroll

• in connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid

• to certain officials of the U.S. Department of Education, the Comptroller General, to state and local educational authorities, in connection with certain state or federally supported education programs

• to accrediting organizations to carry out their functions

• to organizations conducting certain studies for or on behalf of the College

• the results of an institutional disciplinary proceeding against the alleged perpetrator of a crime of violence to the alleged victim of that crime with respect to that crime.

• directory information as defined in the policy of the Board of Trustees.

The Connecticut Community College System has designated the following as directory information: student names and addresses, dates of attendance, full vs. part-time student status, awards, major/program of study, honors and graduation date. For purposes of access by military recruiters only, telephone listings and, if known, age and level of education are also designated as directory information.

4. The right to refuse to permit the College to release directory information about the student, except to school officials with a legitimate educational interest and others as indicated in paragraph 3. This is called the "Opt-Out" option. A student exercising this right must notify the Registrar in writing. There is an "Opt Out" form on the college website at http://www.trcc.commnet.edu/Div\_StudentServices/Registrar/ documents/FERPA-OptOut-Form.pdf that can be used for this purpose. Once filed, this notification becomes a permanent part of the student's record until the student instructs the College, in writing, to remove it.

5. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Colleges to comply with the requirements of FERPA. The name and address of the Office is available in the Registrar's Office.





Most financial aid at Three Rivers is provided by federal programs. Grants are considered "gift" aid and do not need to be repaid. Low interest loans are to be repaid over an extended period once a student ceases half-time attendance. Part-time employment is another form of assistance; the student is paid an hourly wage (Work-Study Program).

#### ANY INFORMATION PROVIDED TO THE FINANCIAL AID OFFICE IS TREATED CONFIDENTIALLY AND USED ONLY TO DETERMINE NEED AND AWARD OF AID.

The Financial Aid Office supplies information about the various forms of financial aid to students including grants, loans, scholarships, and work-study opportunities. This information is also fully described in the College catalog. Students must reapply each academic year for financial aid.

## **APPLYING FOR FINANCIAL AID**

The Free Application for Federal Student Aid (FAFSA) is available on-line at (www.fafsa.ed.gov). This application enables the student to apply for all sources of financial assistance awarded by the college as well as the Federal Pell Grant. Upon completion of the application procedures outlined below, the applicant will have applied for all sources of aid available through the Financial Aid Office. Applications should be submitted to the Federal Government by May 1 for students enrolling in August (fall semester) or November 1 for students enrolling in January (spring semester). Adhering to these deadlines will assure students of priority consideration and an answer concerning eligibility before the semester begins. However, applications are accepted throughout the academic year since financial aid is awarded to students until funds are depleted.

To be considered for financial aid, the applicant must complete the following steps:

1. Complete the process for admissions (see the Admissions section of this catalog for detailed instructions).

2. Complete and submit the Free Application for Federal Student Aid (FAFSA) on-line at **www.fafsa.ed.gov.** 

3. Provide any additional documentation required by the Financial Aid Office after completion of the FAFSA application.

## **Determination of Need**

Financial aid is granted on the basis of need. A student's financial need is the difference between the total cost of one academic year of study at the College and the total resources available to the student, based on information supplied on the Free Application for Federal Student Aid (FAFSA). The amount of aid awarded to a particular student is determined by the Financial Aid Office and depends on the student's financial need and the availability of funds. The cost of education includes the direct costs of tuition, fees, books and supplies, and indirect costs including personal expenses, transportation, meals, and housing costs.

## **Requirements for Financial Aid Recipients**

Applicants must:

- be enrolled in a degree or certificate program by having completed all necessary admissions steps.
- be in good academic standing and making satisfactory academic progress. This is defined as a progression toward successful academic completion of course requirements for a degree or certificate by maintaining a minimum Grade Point Average (GPA) of 2.0 and successfully completing at least 67% of the credits attempted on a cumulative basis. See the next section "Satisfactory Academic Progress Policy" for complete details.
- be a citizen or eligible non-citizen of the U.S. or Trust Territories.
- not be in default in the repayment of any educational loans or owe a refund on any Title IV grant program at any institution.
- be registered with the Selective Service if you are a male.
- have not been convicted of an illegal drug offense while receiving financial aid.

## **Satisfactory Academic Progress Policy**

The Satisfactory Academic Progress Policy is available at:

http://www.commnet.edu/finaid/Documents/ FinAid\_Aca-demic\_Progress\_Policy.pdf.

If you are currently suspended you can appeal your status by completing the following form: www.commnet.edu/finaid/ download/K/SAPappeal.pdf.

## Satisfactory Academic Progress (SAP) Appeals Policy

Students may appeal any decision under the SAP Policy. A student must complete the Satisfactory Academic Progress Appeal form which one can obtain from the financial aid office and online at our website (http://www.commnet.edu/finaid/ download/K/SAPappeal.pdf.). Appeals will be considered for emergency circumstances including illness, death of a family member or other unusual situation. All students MUST meet with an Advisor first and obtain the advisor's signature on the Appeal Form before the Financial Aid Office will consider their appeal. All students will be expected to provide clear evidence in their appeal form of the following issues: 1) state the reason for appeal 2) what has changed from the time when unsatisfactory academic progress occurred and 3) how (s)he will be capable of overcoming past academic difficulties. In addition, students must provide third party documentation to support their claims (i.e., medical evidence of illness, death certificate, etc.).

## **FINANCIAL AID PROGRAMS**

Programs of Financial Aid described herein are subject to change due to Federal, State and local regulations or funding fluctuations.

#### FEDERAL PELL GRANT PROGRAM

This grant, based on need, is intended to be the "base" of a financial aid package, and may be combined with other forms of aid to meet the direct cost of education.

## FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)

This program provides grants to eligible students demonstrating financial need. Preference is given to students with exceptional need. A student MUST be eligible for the PELL Grant to receive SEOG.

#### **GOVERNOR'S SCHOLARSHIP PROGRAM**

Connecticut grants are awarded to Connecticut resident students who have serious financial need. Grants range up to the direct cost of education (tuition, fees, books) per academic year and are based on satisfactory academic progress, financial need and the availability of funds.

#### COMMUNITY COLLEGE GRANT PROGRAM

This State program allows for the remission of tax supported tuition, fees, and cost of books for resident students who demonstrate substantial financial need.

#### FAMILY DIRECT LOAN PROGRAM (FORMERLY STAFFORD LOAN)

The interest rate is determined each academic year by the government. Payments are deferred until the student is enrolled less than half-time or no longer enrolled.

#### **COLLEGE WORK-STUDY PROGRAM**

This program provides college jobs for students who need money. Students work up to a maximum of twenty hours per week during academic periods and up to thirty-five hours per week during vacation periods depending on their financial need and the availability of funds. Hours can be arranged to suit a student's academic schedule. Any student seeking workstudy campus employment should contact the Financial Aid Office.

## FINANCIAL AID WEBSITE:

Visit www.threerivers.edu and click on "Student Services" then "Financial Matters"

## **ALL TUITION & FEE INFORMATION**

#### **NON-REFUNDABLE FEES**

All students at the time of registration for credit courses must make a non-refundable payment of the college services and student activity fees, plus lab fees, applicable to the courses for which a student is registered.

#### TUITION

Tuition charges are based on the number of credits and the student's residency status at the time of registration. Students who register for more than 17 credits in any semester will be charged an additional flat amount of \$100 tuition. The total tuition owed is payable by the payment date deadline specified by the College each semester. All registrations between the announced deadline and the first day of classes shall be accompanied by full payment of all applicable tuition and fees unless an installment payment plan option, financial aid or other deferred payment arrangement option has been approved by the College.

Student accounts that have not been paid by the tuition due date are subject to a \$15 late payment fee.

#### **ON-LINE COURSE TUITION AND COLLEGE SERVICE FEES**

Students registering for On-Line (distance learning) courses will be charged tuition and fees based on their residency status.

### **Special Fees (Non-Refundable)**

#### **Student Activity Fees:**

FT Student/Semester	\$ 10.00
PT Student/Semester	\$ 5.00
Educational Extension Fees:	
Academic Evaluation Fee	\$ 15.00
Portfolio Assessment Fee	\$100.00
Proctoring Fee/Test	\$ 35.00
Auxiliary Activity Fees:	
Application Fee*	\$ 20.00
Program Enrollment Fee (2)	\$ 20.00
Installment Plan Late Fee	\$ 15.00
One Time Replacement of Diploma	\$ 10.00
Credit by Examination Fee	\$ 15.00
Returned Check Fee	\$ 25.00
Replacement of Lost ID Card	\$ 10.00
Late Payment Fee	\$ 15.00
Installment Plan Fee	\$ 25.00
CLEP Service Fee (3)	\$ 15.00

\*The application fee will be waived for those students who previously applied to any Connecticut Community College.

Fees are subject to change; College Presidents, with the approval of the Chancellor, are authorized to waive General and Special Fees of students enrolled in special programs when the circumstances justify such action.

## NEW ENGLAND REGIONAL STUDENT PROGRAM (RSP/NEBHE)

Each New England state admits out-of-state New England residents for study at its public, degree-granting colleges, universities and institutions. At Three Rivers Community College, these students pay the same tuition and fees as a Connecticut student, plus a 50% surcharge. See the "Admissions" section for program eligibility requirements.

### **Tuition and Fee Waivers**

#### SENIOR CITIZENS

Tuition, general fees, and the application fee are completely waived for people 62 years of age and over who wish to register for state-supported (General Fund) courses on a space available basis. Special fees must still be paid. Those requesting the waiver must present verification of date of birth. Senior citizens register at the conclusion of each registration period on a space available basis.

#### CONNECTICUT TUITION WAIVER

This waiver is available for eligible Connecticut veterans. Public Act 03-85 amended the definition of "service in a time of war." For purposes of identifying eligible veterans, Connecticut has adopted the Federal definition (U.S. Code 38 USC 101, as amended).

War periods include:

- Spanish-American War
- Mexican border period
- World Wars I and II
- Korean conflict
- Vietnam era
- Persian Gulf War (August 2, 1990 until a date prescribed by the President or law)

Periods beginning on the date of any future congressional declaration of war and ending on the date prescribed by the presidential proclamation or concurrent resolution of Congress.

Note: Because the Persian Gulf War is still in progress, veterans currently serving or who have served at least 90 days any time between August 2, 1990 and the date the Persian Gulf War ends are eligible for war service benefits. Connecticut continues to recognize certain smaller conflicts that are not included in the Federal definition:

- Lebanon conflict (7/1/58 to 11/1/58 Combat or combat support role only)
- Peacekeeping mission in Lebanon (9/29/82 to 3/30/84)
- Invasion of Grenada (10/25/83 to 12/15/83)
- Operation Earnest Will (escort of Kuwaiti oil tankers 2/1/87 to 7/23/87)
- Invasion of Panama (12/20/89 to 1/31/90)

To use the Waiver, students must present proof of service plus proof of residency. The latter may include rent receipts, tax bills, voter registration cards, or other documentation showing residence in Connecticut.

The 100% tuition waiver is applicable only to General Fund

courses and is available for veterans if they are residents of Connecticut. In addition, any child of a Vietnam-era veteran who has been declared a MIA/POW is eligible, provided that the parent entered the service after January 1, 1960 and was a Connecticut resident upon entry or while serving in the Armed Forces. Veterans from other states who established residency through marriage to a Connecticut resident during the above times may also be eligible

#### CONNECTICUT NATIONAL GUARD

The tuition of any eligible member of the Connecticut Army or Air National Guard shall be waived if they wish to register for state-supported (General Fund) courses. To be eligible for such a waiver, a member of the Connecticut Army or Air National Guard must: (1) be a resident of Connecticut; (2) present certification by the Adjutant General or his designee as a member in good standing of the Guard; and (3) be enrolled or accepted for admission to a community college on a full-time or parttime basis in a degree granting program. The tuition waiver shall be reduced by the amount of any educational reimbursement received from an employer.

## **Installment Payment Plan Policy**

An installment plan option will be available to students in good standing enrolled in General Fund courses for six or more credits during the fall or spring semesters. The first payment includes all general fees, the \$25 installment plan fee and the first third of the tuition.

A student wishing to utilize the installment payment plan must make arrangements with the College's Cashier Office during specified times prior to each semester. The Cashier's Office will complete the Installment Payment Plan Agreement, which will be signed by the student or legal guardian.

Payments must be made by the due dates indicated on the agreement to avoid the late payment fee (\$15).

### **TUITION & FEE SCHEDULE**

Tuition and fees for Connecticut Community Colleges are established by the Connecticut State Colleges & Universities Board of Regents for Higher Education. These charges are subject to change by the Board without prior notice. Students are urged to consult the College's web site for complete and current tuition and fee information.

Click here to view the current breakdown of tuition & fee expenses



## REFUNDS

## **Refund of Tuition and Fees**

Student will receive a full refund of tuition and fees if the College cancels a course.

Refund of Tuition Only

Please refer to the Academic Calendar or the website for refund deadlines. Requests for refunds of tuition must be directed to the Registrar's Office by mail, e-mail (registrar@trcc. commnet.edu) or fax (860-215-9919). Students should retain a confirmation receipt for their records.

Withdrawal and reduced course load requests may also be made in person at the Registrar's office during normal business hours.

Note: College Service and Student Activity fees are not refundable unless the college cancels the course.

## **Fall and Spring Full Semester Courses**

Students who wish to drop all registered courses and receive a refund shall direct their request to the Registrar's Office. If the written notice is received prior to the first day of classes for the semester, 100% of the tuition for all dropped courses will be refunded. If written notice is received on or after the first day of classes for the semester through the first 14-calendar days of the semester, a 50% refund of tuition will be made.

## **Fall and Spring Module Courses**

Students wishing to drop from modular courses with beginning and ending dates which do not correspond to the full semester schedule are required to direct their request to the Registrar's Office. This must be done prior to the first scheduled class meeting in order to receive a 100% refund of tuition. A 50% refund of tuition will be granted if written notice is received according to the following schedule:

week module - within the first day of the module
 week module - within the first 5 calendar days of the module
 week module - within the first 6 calendar days of the module
 week module - within the first 7 calendar days of the module
 week module - within the first 8 calendar days of the module

#### **REDUCTION IN COURSE LOAD**

For a reduction in course load which occurs on the first day of classes and through the fourteenth calendar day of that semester, 50% of the difference of the tuition applicable to the original and revised schedule will be refunded.

## REDUCTION IN COURSE LOAD FOR FINANCIAL AID STUDENTS

Financial Aid students who reduce their course load will incur the same costs as non-financial aid students, but these costs and credits are not included in determining their financial aid amount. Awards are based on the number of credits the student is registered for at the conclusion of the add/drop period. Please contact the Financial Aid office if you have any questions.

# SUMMER AND WINTER SESSION COURSES SUPPORTED BY THE EDUCATIONAL EXTENSION FUND

Students who wish to drop all registered summer or winter session courses shall direct their written requests for course drops and refunds to the Registrar's Office. One hundred percent of tuition will be refunded if notice is received prior to 4:00 p.m. on the day preceding the first scheduled class meeting (requests must be received by 4:00 p.m. Friday for courses that meet first on Monday). No refund of tuition will be granted if the notice is received on or after the first day of class.

## **Refund Exceptions**

A 100% refund of tuition and fees is granted to students who enter the armed services before earning degree credit for that semester. In this case, notice and a certified copy of enlistment papers must be submitted to the Registrar's Office. No other refund of tuition will be granted for either full-time or part-time students beyond the 14th calendar day after the first day of classes. Exceptions to the tuition refund policy due to extenuating or extraordinary circumstances will be considered upon written request submitted to the Dean of Administration via mail or email (waiverrequest@threerivers.edu). Please provide your full name and student I.D. in the subject line along with a detailed request, contact information and backup documentation which can be attached to the email or faxed (860-215-9901).

## Repayment Policy for all Federal Aid Recipients

Effective October 2000, regulations governing the administration of Federal Title IV Financial Aid Funds (i.e. Perkins Loan, Pell Grant, Supplemental Educational Opportunity Grant and Family Educational Loan Program) have changed significantly. All students receiving this federal student aid who withdraw or stop attending all classes prior to the 60% point of the semester will be required to return and repay a portion of this funding.

In case of early withdrawal, the college is required to recalculate that student's financial aid eligibility and determine what percentage of federal aid has been earned based on the date of the student's withdrawal. (This percentage is directly proportional to the number of calendar days attended by the student divided by the number of calendar days in the semester.) Any "unearned" federal aid must be returned as follows:

• Any "unearned" federal aid collected by the college for student tuition and fees: These funds must be returned in total to the Federal Government. The student will then become liable to the college for this amount and will be billed accordingly.

• Any "unearned" federal aid paid directly to the student or on the student's behalf (bookstore charges, daycare, transportation, etc.): 50% of this debt will be forgiven, but the remaining 50% must be repaid to the Federal Government by the student within 45 days.

Since these Federal Title IV Regulations must be strictly enforced, all participating students are urged to take the following action to prevent potential problems in this area:

• Work closely with the Financial Aid Office to understand their rights and responsibilities under the new regulations.

• Work closely with their academic advisor in selecting courses and determining reasonable academic loads for each semester.

• Consider the demands of work and family when deciding how many courses to take.

• Attend classes and maintain satisfactory academic progress as required. Failure to attend classes and to comply with these financial aid regulations will permanently jeopardize future eligibility for federal assistance.

### **Residency Requirement**

To be entitled to the in-state tuition rates established for Connecticut residents, a student must be a Connecticut resident for a minimum of 12 months, with the exception of active duty military personnel and their families and those who meet the New England Board of Higher Education (RSP/NEBHE) guidelines. International students issued an I-20 and those on temporary work visas are not entitled to the in-state tuition rates for Connecticut residents.



FOR COMPLETE AND UP-TO-DATE ACADEMIC INFORMATION, VISIT WWW.THREERIVERS.EDU

### **STUDENT DEVELOPMENT AND SERVICES**

The mission of the Student Development and Services Division is to provide a welcoming and supportive environment which will enhance students' ability to achieve their highest potential through education, programs, and services. Our activities and services strive to:

- Build community awareness of college programs and services
- Recruit and enroll a diverse student population
- Provide an environment that encourages learning beyond the classroom
- Develop skills in decision-making, problem solving and leadership
- Encourage students to participate in community service, athletics, and cultural enrichment programs in the arts
- Recognize and encourage individual achievement
- Recognize alumni and include them in enriching programs and services
- Create opportunities for students to explore personal and career choices

#### THE COUNSELING & ADVISING CENTER

Attending College is an exciting and challenging experience for students. So much is new: courses, people, learning and future opportunities. Along with the exciting, new experiences often come a variety of unexpected experiences. Whether a first-time, returning, or transfer student, there are often challenges to be managed: personal and family life, academics, time, and financial constraints. The Counseling and Advising Center supports students during these times and throughout their college journey. Staffed with dedicated professionals, the Counseling and Advising Center offers a full range of academic and personal support services. Counselors and staff work in conjunction with faculty to foster student growth and success. Services in the Center help students clarify and establish meaningful academic, career or personal goals and help them build and implement action plans to fulfill their goals. One-on-one, workshops, assessments and special groups support students as they sort through competing interests and needs to achieve their goals.

Services of the Center focus on:

- Academic advising and counseling
- Career counseling and information
- Transfer opportunities
- Physical, psychological and special learning needs
- Employment counseling and resources for full and part-time jobs and internships
- Personal counseling and development
- · Referral to community agencies and resources

#### ACADEMIC ADVISING

The Counseling and Advising Center is a major resource for students adjusting to and navigating through college. The Center focuses on academic success and developing the necessary skills and understanding for students to select courses and successfully complete their degrees. Through group and individual advising students are introduced to the wide array of services provided by the college. Students are prepared for their initial semester at the college and equipped with the knowledge of important tools and tips to be successful. Further into their tenure, students are supported with ongoing advising regarding the choice of courses or the selection and change of major. Student learning styles are also assessed to understand strengths and needs, and help students improve needed skills. Graduation audits are completed by assigned advisors as students prepare to complete their studies or transfer to another institution.

#### **CAREER COUNSELING**

Counseling and Advising provides career counseling to support students' academic and career success. Focused on student empowerment, career counseling is an information-based service striving to expand student awareness of self, career options and effective pathways to achieve selected careers. Services include career assessment, individual and group counseling, and programs such as "Dress for Success," networking, and career expos. A four-step model is used and includes: 1. Exploring personal values, skills, interests and personal preferences 2. Exploring the variety and reality of careers 3. Relating academic majors to career outcomes 4. Building academic and career plans to enhance success.

#### **EMPLOYMENT COUNSELING**

Most TRCC students work full- or part-time while enrolled at the College. Many look to enhance the significance of that work in relation to long-term career goals. Employment counseling is focused on helping students increase their understanding of and effectiveness in searching for and obtaining employment. An online student employment service lists full- and part-time jobs, and internships at www.collegecentral.com/threerivers. It is free and open to all students and alumni, providing employment opportunities locally and across the state. Students have unlimited free access to this service which also provides tutorials on writing resumes, interviewing, and job search. Each student can house their resume on the site and allow open access to employers working with the college. Students also have access to online portfolio services to provide employers with examples of projects, art work, awards, etc. Individual appointments and group workshops for students help to write effective resumes, enhance and practice interviewing skills, and implement job search strategies. Employers are welcomed on campus to recruit students and attend Career Expos. Ongoing collaboration with faculty across disciplines also support student development of career awareness and job-search skills. Alumni are engaged to build networks for students seeking career information or employment in a variety of fields.

#### PERSONAL COUNSELING

Counseling and Advising provides confidential counseling and support to all students. Counselors are available to respond to the wide variety of questions and concerns students experience as part of college or their personal life. Individual and group counseling focuses on building life and academic skills as well as support for overcoming learning challenges such as anxiety, motivation, focus, study skills, test-taking strategies, and time management. A variety of programs target at-risk students and assess their strengths and needs. Counselors then work with these students to develop learning plans to build effective strategies and outcomes. Counselors are also available for faculty and students when personal or emotional needs arise in class or on campus. Referrals are made to community agencies and services as appropriate.

#### DISABILITIES

In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1992, the college offers support services and reasonable accommoda-

tions on an individual basis to qualified students with documented disabilities.

Students new to college will find these services different from those of high school, and will be responsible for self-identifying the need for accommodations and providing necessary support documentation to obtain it. All students receive information on this process in the admissions acceptance packet and it can be obtained in the Counseling and Advising Center. Students with disabilities are encouraged to meet with a disabilities service provider several weeks before registering for classes in order to allow adequate time for processing their needs and communicating those needs to faculty. All information is confidential between the student, the Counseling and Advising Center staff and designated faculty. Referrals to community resources for assessment are also available.

#### COMMUNITY RESOURCES AND REFERRALS

Three Rivers Community College students can access support services pertaining to personal or family non-academic needs through a network of community based agencies. Student Support Services in the Counseling Center has resource and referral information to help students in a wide variety of areas. These include, but are not limited to, mental health, basic needs (housing, food, energy), money management, addiction, health care, family and parenting needs.

#### **COLLEGE TRANSFER**

The Counseling and Advising Center provides students with information on transfer options to a variety of other educational institutions. This support includes:

- Individual transfer counseling and advising
- · Group workshops on the process of transfer
- College Fairs with representatives from prospective transfer institutions

Guaranteed transfer options to state and private colleges and universities

Transfer compacts with many state and private colleges are open to students who apply prior to the completion of 15 college-level credits. For other transfer students, counselors work to insure the completion of the maximum coursework at TRCC that will transfer to another college. Student Services Advisors and Counselors also provide information to incoming transfer students, helping them understand the transfer-in process for credits from other educational institutions.

# Guaranteed Admission, Dual Admission, and Transfer Agreements

The following programs have been developed to guarantee admission and to help students transfer successfully to fouryear universities. Additional information on these programs is available on the web or at our Admissions or Student Development offices.

#### GUARANTEED ADMISSION TO THE CONNECTICUT STATE UNIVERSITY SYSTEM: CENTRAL, EASTERN, SOUTHERN AND WESTERN

Graduates of an associate degree program within the Connecticut Community College System with a grade point average of 2.0 or higher are guaranteed admission to the university of their choice within the Connecticut State University System. In the case of majors for which articulation agreements have been adopted, Community College students preparing for transfer should follow the terms of the articulation agreement regarding course prerequisites, grade point averages, and other requirements stated in the agreement. Graduates of the Community College will be admitted as juniors and will be expected to complete two years of full-time (or equivalent part-time) study at the university to be eligible for the bachelor's degree. Graduates of the Community College must make application by the date and on the forms prescribed by the university, including the submission of all the required transcripts, documents, and fees.

#### DUAL ADMISSION AGREEMENT WITH THE CONNECTICUT STATE UNIVERSITY SYSTEM: CENTRAL, EASTERN, SOUTHERN AND WESTERN

Three Rivers and the Connecticut State University System have entered into an agreement for incoming Three Rivers' students to dually enroll with a designated Connecticut State University. Students must apply for this dual admission program before they earn 15 college-level credits and must designate their school of choice at the time of application. Students are required to complete the Associate's degree within five years of signing the compact and transfer to their designated college within two years of receiving the degree. Students are advised by both schools throughout their associate degree program. Students are guaranteed admission to the designated university upon completion of the degree with a 2.0 grade point average.

## ARTICULATION AGREEMENT WITH EASTERN CT STATE UNIVERSITY EARLY CHILDHOOD EDUCATION:

Three Rivers' graduates with an Associate's in Early Childhood Education will be waived up to 18 credit hours of coursework in Eastern's Early Childhood Education program. Students are encouraged to meet with TRCC's Early Childhood Education Program Coordinator and Eastern's Education Department Chair to receive additional information.

#### GUARANTEED ADMISSION PROGRAM TO THE UNIVERSITY OF CONNECTICUT

The Guaranteed Admission Program (GA Program) is an agreement between Three Rivers and the University of Connecticut. This program guarantees incoming Three Rivers' students in Liberal Arts and Science programs admission to UCONN's College of Liberal Arts & Sciences or College of Agriculture and Natural Resources upon completion of an associate degree with a 3.0 minimum cumulative average or UCONN's School of Business with a 3.3 minimum cumulative average. Students must apply for the program prior to attempting 30 college-level credits and must complete the Associate's degree within five years. In addition, an Intent to Enroll form for UCONN would need to be completed the beginning of the semester prior to transfer.

#### AGREEMENT BETWEEN THE CONNECTICUT COMMUNITY COLLEGE SYSTEM AND THE BACHELOR OF GENERAL STUDIES (BGS) PROGRAM AT THE UNIVERSITY OF CONNECTICUT

This program is an agreement between the Connecticut Community College System and the Bachelor of General Studies (BGS) Program at the University of Connecticut guaranteeing admission into the BGS program upon the successful completion of the associate's degree with an overall grade point average of 2.0 or better. Students are also guaranteed that they will begin studies at UCONN with junior level status.

#### AGREEMENT BETWEEN THE CONNECTICUT COMMUNITY COLLEGE NURSING PROGRAM AND FAIRFIELD UNIVER-SITY, CENTRAL CT STATE UNIVERSITY, GOODWIN COL-LEGE, SACRED HEART UNIVERSITY, SOUTHERN CT STATE UNIVERSITY, UNIVERSITY OF HARTFORD, UNIVERSITY OF SAINT JOSEPH, UNIVERSITY OF WISCONSIN-GREEN BAY, AND WESTERN CT STATE UNIVERSITY

The Connecticut Community College Nursing program has entered into agreements to provide seamless transfer for graduates of the Registered Nurse (R.N.) program to enter into a Bachelor's of Science in Nursing (B.S.N.). You may only apply after you are accepted into the Nursing program. Please go to the following website for more details: www.commnet.edu/ nursing/Educational\_Opportunities.asp.

#### ADMISSION AGREEMENT WITH ALBERTUS MAGNUS COLLEGE – UNDERGRADUATE ADULT PROGRAM

Three Rivers Community College graduates with an Associate of Science degree (A.S.) and a 2.0 g.p.a. may transfer to Albertus Magnus College (AMC) with up to 63 credits toward a Bachelor degree in Business Management. Students must articulate intent to enroll and complete the application process by meeting the admission criteria of two years work experience, providing two letters of recommendation, and agreeing to a review of discipline, criminal history, and accommodation needs. Program specific articulations for Accounting Transfer and Business Administration Transfer are in place. Courses graded below a "C" will transfer only with an earned Associate's degree. An additional 9 credit hours of general education or elective courses may be taken at TRCC while attending AMC. Students will have the opportunity to meet with representatives from AMC on a regular basis.

#### AGREEMENT WITH BISMARCK STATE COLLEGE

The Community College System has entered into an agreement with Bismarck State College to offer Three Rivers students enrolled in the Associate's degree in Technology Studies to take online classes in Electric Power Technology at Bismarck State College as a career pathway in the energy industry. The courses will apply to the Associate's degree program at the community college. This agreement is in conjunction with CL&P and includes a summer internship. Students need to contact Professor Patrick Knowles, Program Coordinator for Technology Studies, at (860) 215-9445 to review the application process.

## ARTICULATION AGREEMENT WITH CHARTER OAK STATE COLLEGE

Three Rivers Community College has an articulated agreement that students entering Charter Oak State College for a Bachelor's degree may be awarded up to 90 credits to meet the General Education and other distribution requirements at Charter Oak. Students will be advised by a representative from Charter Oak State College in order to meet their degree requirements.

## TRANSFER AGREEMENT WITH FAIRFIELD UNIVERSITY SCHOOL OF ENGINEERING

The School of Engineering of Fairfield University will accept associate degree graduates from the Electrical Engineering Technology and Mechanical Engineering Technology programs at Three Rivers into its baccalaureate degree program in Electrical Engineering and Mechanical Engineering provided that these transfer students have earned a grade point average of 3.0 or better (on a 4.0 scale). Students with a GPA between 2.5 and 3.0 will be considered on an individual-basis only. This transfer agreement requires that the student pass Fairfield's specified bridge course (EG 32), which may be offered online, and pass Calculus I at Three Rivers with a grade of B or better before matriculation at Fairfield University. Fairfield agrees to transfer in most of the general education, science and engineering courses taken at Three Rivers, up to 66 credits.

#### GUARANTEED ADMISSION AGREEMENT WITH MITCHELL COLLEGE CRIMINAL JUSTICE PROGRAM

The Guaranteed Admission Agreement with Mitchell College's Criminal Justice Program allows Three Rivers Community College students who graduate with an A.S. degree in Criminal Justice - Enforcement Option up to 63 credits towards a Bachelor's Degree in Criminal Justice at Mitchell College. Students must earn a minimum GPA of 2.0 upon completion of the associate degree in order to participate in the program. All credits earned in the degree program with a grade of C or higher at Three Rivers will transfer to Mitchell. Students enrolled in this program will be advised by both Three Rivers and Mitchell College throughout their associate degree program.

## GUARANTEED ADMISSION AGREEMENT WITH MITCHELL COLLEGE EARLY CHILDHOOD EDUCATION

The Guaranteed Admission Agreement with Mitchell College's Early Childhood Education program allows Three Rivers Community College students who graduate with an A.S. degree in Early Childhood Education to transfer a minimum of 55 credits into the Early Childhood Education at Mitchell College. Students must earn a minimum GPA of 2.67 upon completion of the associate degree in order to participate in the program. Students need to be continuous in courses at Three Rivers and have a "C+" or better in all Early Childhood courses. Students admitted to Mitchell College are not guaranteed admission to the Teacher Certification program. Students enrolled in this program will be advised by both Three Rivers and Mitchell College advisors throughout their associate degree program.

# ARTICULATION AGREEMENT WITH POST UNIVERSITY SPORT MANAGEMENT

Three Rivers and Post University have established an agreement for Sports & Leisure Management to transfer to Post University's baccalaureate degree in Sport Management. Students that earn an associate's degree in Sports & Leisure Management and/or earn a "C" level or better in courses in the program of study will have all credits transfer toward the bachelor's degree in Sport Management at Post University.

## GUARANTEED ADMISSION AGREEMENT WITH SACRED HEART UNIVERSITY

The Guaranteed Admission Agreement with Sacred Heart University serves to assist students in a seamless transition from Three Rivers to the University. This program guarantees incoming Three Rivers students admission to Sacred Heart University upon completion of the associate degree with a 2.5 minimum cumulative average. Students must enroll in this program prior to earning 15 college credits and the Associate's must be completed within four years with up to a maximum of 66 credits. Certain programs at Sacred Heart may require a higher grade point average, additional prerequisites or a separate admis-

sions application to enter their program. Students enrolled in this program will be advised by both Three Rivers and Sacred Heart throughout their associate degree program.

#### COMPREHENSIVE ARTICULATION AND TRANSFER AGREE-MENT WITH THE UNIVERSITY OF BRIDGEPORT

This Comprehensive Agreement serves to assist Three Rivers' graduates in A.A., A.S., and A.A.S. programs to transfer up to 66 credits into baccalaureate degrees at the University of Bridgeport. Students who graduate with the Associate's degree and a GPA of 2.5 are guaranteed admission to the University of Bridgeport. Students completing the Guaranteed Admission will have application fees waived, expedited transfer admission, and seniority consideration for academic grants and on-campus housing. Students will have the opportunity to meet with the University of Bridgeport advisor each semester.

## GUARANTEED ADMISSION AGREEMENT WITH THE UNIVERSITY OF BRIDGEPORT

This Guaranteed Admission Agreement serves to assist Three Rivers' graduates in Accounting, Business, or Marketing Transfer programs into baccalaureate degrees in the School of Business at the University of Bridgeport. Students who graduate with the Associate's degree and a GPA of 2.5 are guaranteed admission to the University of Bridgeport in the following degree programs: Accounting, Business Administration, Computer Applications & Information Systems, Finance, Marketing, International Business, or Management. All courses with a grade of "C" or better will be accepted for transfer credit. Students who complete the Bachelor of Science degree at the University have the possibility of earning a Master's degree (MBA) with only one additional year of study.

#### DUAL ADMISSIONS/CORE TO CORE TRANSFER AGREE-MENT WITH THE UNIVERSITY OF NEW HAVEN

The Dual Admission program allows for Three Rivers' students with Associate degrees in Arts or Sciences to transfer into any of the University of New Haven's Bachelor degree or Accelerated degree programs with junior status. Three Rivers' graduates must have a 2.5 or better grade point average and complete the intent to enroll form prior to applying to University of New Haven. Students with grade point averages under 2.5 will be reviewed on an individual basis. Credit will be granted for transfer courses with a C grade or better; grades of C- or D may transfer with faculty or Dean permission. Financial grants to be awarded based on academic standing and enrollment status. Specific program to program agreements supersede this agreement. Both colleges will have designated advisors to assist students throughout the program.

## ARTICULATION AGREEMENT WITH THE UNIVERSITY OF NEW HAVEN CRIMINAL JUSTICE PROGRAM

This articulation is an agreement between Three River's Associate in Science in Criminal Justice and the University of New Haven BS in Criminal Justice (BSCJ) offered by UNH's Henry C. Lee College of Criminal Justice & Forensic Sciences. Corresponding courses in the criminal justice program with a "C" grade or higher will qualify for transfer credit in addition to approved electives. Students may also enter into the Dual Admissions agreement listed.

#### TRANSFER COMPACT AGREEMENT WITH THE UNIVERSITY OF NEW HAVEN DENTAL HYGIENE PROGRAM

The Dental Hygiene Transfer Compact is an agreement between Three Rivers and the University of New Haven. This program provides for a smooth transfer from Three Rivers to the University of New Haven Dental Hygiene Program upon completion of the conditions for final acceptance, which include completion of the dental hygiene transfer compact General Studies Certificate or Associate in Science degree with a 2.7 minimum cumulative average and no less than a grade of C in all courses. All science classes must be taken within five years of transfer. Ten seats are reserved for TRCC transfer applicants. Students enrolled in this program will be advised by both schools throughout their program.

#### DUAL ADMISSION/GUARANTEED ADMISSION AGREE-MENT WITH THE UNIVERSITY OF SAINT JOSEPH

This agreement allows for Three Rivers Community College students to dually enroll with the University of Saint Joseph's Weekend Program for Adult Learners during any semester to guarantee their admission into baccalaureate programs in the fields of Accounting, Management, Social Work, or Psychology. Academic advising and support provided by the community college and the University of Saint Joseph staff will help students to make a smooth transition based upon a planned program of study that will maximize transfer credits to their intended bachelor's degree. Students must earn a cumulative grade point average of 2.5 and must enroll in the Weekend Program within two years of completing their associate degree. Once accepted into the program, students will be able to participate in USJ student activities and college events and will have access to USJ library and network center.

#### CONNECTICUT COLLEGE OF TECHNOLOGY

The Connecticut College of Technology is a concept rather than a physical college. There are two discrete plans: a preengineering plan and a pre-technology plan. After successfully completing the specific curriculum requirements, the student will be accepted into an engineering program at the University of Connecticut or a technology program at Central Connecticut State University with advanced placement status. For more information see the College of Technology program of study or contact Professor Patrick Knowles at (860) 215-9445 for specific information and course availability.

## **Student Handbook**

The Student Handbook provides information about the many college services available to students here at Three Rivers and includes a planner for the academic year. The Student Handbook is available online, in the Student Programs Office in F211, and at the Student Services Welcome Center.

### **Student Insurance**

All full-and part-time students are automatically covered under the "School Time Only" Accident Insurance Plan offered through the Connecticut Community College system. "School Time Only" is defined as the time students are attending classes or participating in and traveling to an activity sponsored by the College. An optional 24-hour Accident and Sickness Plan is also available to interested students. For enrollment information and cost, go to

https://www.aetnastudenthealth.com/students/ student-connection.aspx?GroupID=867900.

### **Student Programs**

Students can enhance their experiences at Three Rivers by participating in student activities and events, helping them develop leadership skills and create friendships. Student Programs coordinates the STARS (Student Activities Reward System) program, as well as student activities on and off campus, and oversees the Student Lounge, Veterans Oasis Center, and Game Room. Student Programs advertises upcoming activities on their Facebook page (TRCC Student Programs Office), with flyers around campus, on the monitors throughout the campus, and produces The Campus Link, a weekly publication informing students of upcoming activities. A complete list of student organizations is available in the Student Programs Office (F211).

Student IDs can be obtained through the Student Programs Office in room F211 or at the Welcome Center Desk in room A113. The IDs can be used in the library to check out books and other materials and for Wellness Center check-in. Though these IDs are not mandatory, they are a helpful means of identification for students both on and off campus. Students may also receive discounts at area retailers when displaying their ID at the time of purchase. The Student Programs Office has a list of participating retailers. Lost IDs will be replaced, but a nominal fee may be charged for this service.

### **Veteran Services and Benefits**

Eligibility for benefit use is determined by the Veterans Administration. Eligible students may use VA benefits to pursue a degree or certificate as approved by the Veterans Administration. Only students enrolled in approved degree or certificate programs may apply for educational benefits, with the exception of voc-rehab students and those using only the CT tuition waiver. Once a student has registered the College will certify the student's enrollment to the Veterans Administration, if the courses fulfill program requirements. The VA will then pay the appropriate benefits to the student and to the college if using Chapter 33 (Post 911) or Voc-Rehab. Continued eligibility for benefits is contingent upon the student complying with College regulations, documenting continued class attendance, and confirming plan of study requirements. Only courses required for degree or certificate completion are covered by VA benefit programs. Additional courses selected by the student become the financial responsibility of the student. Advisement sessions and personal counseling are available to veterans. Interested veterans should contact the Veterans Representative, Terri DeBarros in the Registrar's Office (860) 215-9235, for further information and assistance. Additional information for veterans can be found in the Admissions and Tuition & Fees sections in this catalog.

## **Oasis Center**

The Oasis Center is a resource center for student veterans. It is a place where veterans can meet, offer support to one another, and obtain information about benefits and other services available to them. The Oasis Center is located in room F203.

## **College Cafeteria**

The cafeteria is a popular gathering spot for students and staff. Breakfast items, hot meals, hamburgers, sandwiches, salad bar, fried food items, and snacks are available when classes are session. In addition to providing a comfortable dining area, the cafeteria serves as a general lounge and study space. The "Cyber Café" is conveniently located at the main entrance and provides additional quick food and beverage service during off peak times. Cash, credit and debit cards are accepted at both locations. ATM and vending machines are also available.



## **College Bookstore**

The Bookstore is located at the main entrance of the college. Students may purchase required and optional textbooks, both new and used as well as placing special orders. The campus bookstore also stocks school supplies, reference books, imprinted clothing, software, backpacks, and snacks. Bookstore hours of operation are published in the schedule of classes each semester. Students can also visit the bookstore web site at www.efollett.com.

## **Health and Wellness Center**

Our fully equipped Health and Wellness Center is available free of charge to everyone who is actively part of the college community. In addition to the cardiovascular and weight training rooms, the center includes a studio room that is used for a variety of credit and non-credit programs, health screenings, mini workshops and Student Activities sponsored events. Showers and lockers are available within the center. The operating hours are generally Monday – Friday 7:00am-7:00pm. This schedule may vary due to semester break, class schedules, or during the summer. Participants wanting to use the center are required to complete a liability form and wear proper workout attire. If you have any questions regarding the center, please call (860) 215-9047.

## **Art Gallery**

Three Rivers Gallery is a contemporary visual art space with rotating exhibits featuring works of emerging and established artists. Student Art Shows are hosted annually in April through May. Through relevant exhibitions with diverse perspectives, and related educational programming, the gallery is dedicated to providing cultural enrichment to the college and the surrounding community. The gallery has the unique opportunity to explore challenging subjects and provide a venue for artists whose work is best suited to non-commercial spaces.

## Parking

Three Rivers clearly designates and differentiates student, handicapped, and staff/faculty parking areas for the convenience and safety of all. Designated student lots are to be used on a first come, first serve basis. Three Rivers has four designated faculty/staff parking lots; one next to the main entrance, the second across the street from the main entrance, a third parking lot adjacent to the Child Care Center between the main building and the Central Utility Plant (CUP) building, and a fourth behind the CUP building. During the day from 7AM – 6PM, these parking lots are to be used only by registered faculty and staff members. After 6PM on weekdays, the faculty/staff parking lots may be used as student overflow lots. Anyone who parks in State mandated handicapped spaces, fire lanes, entrances/exits, or Child Care Center drop off spaces for any other intended purpose will be immediately reported to either the Connecticut State Police or Norwich Police. Faculty, staff, and students who would like an escort to their vehicles can make that request at the main entrance security desk.

### **Lost and Found**

The central location for processing, storing and releasing lost and found items is the Security Desk located in the main lobby. All lost items found on campus will be turned into the Security Officer at the Security Desk by the individual finding the item. Valuable items will be turned over to the Dean of Administration. Every reasonable effort will be made to identify the owner of the item turned in and notification will be sent to their TRCC email. Flash drives and computers will be turned over to the Information Technology Division in an effort to determine ownership of those items. Inquiries concerning lost items and claiming lost items should be addressed to the Security Officer at the Security Desk.



A complete text of all institutional policies is available in the office of the Dean of Student Development and Services and is located on the TRCC website.

## AFFIRMATIVE ACTION POLICY/ NONDISCRIMINATION STATEMENT

The Community College System of the state of Connecticut will not discriminate against any person on the grounds of race, color, religious creed, sex, gender identity or expression, age, national origin, ancestry, present or past history of mental disability, genetic information, marital status, mental retardation, sexual orientation, learning disability, or physical disability, including, but not limited to, blindness, or prior conviction of a crime, unless the provisions of sections 46a-60(b), 46a-80(b), or 46a-81(b) of the Connecticut General Statutes are controlling or there is a bona fide occupational qualification excluding persons in one of the above protected groups. With respect to the foregoing, discrimination on the basis of sex shall include sexual harassment as defined in section 46a-60(8) of the Connecticut General Statutes. Although it is recognized that there are bona fide occupational qualifications, which provide for exception from employment prohibitions, it is understood these exceptions are to be applied pursuant to section 46a-68-33 of the administrative regulations. Further, the system will not discriminate against any person on the grounds of political beliefs or veteran status.

#### **RACISM AND ACTS OF INTOLERANCE POLICY**

The Community Colleges have long been committed to providing educational opportunities to all who seek and can benefit from them, as evidenced in the mission statements and policies concerning student rights, affirmative action, and equal opportunity. The Board and the Colleges recognize that an important part of providing opportunity is creating a welcoming environment in which all people are able to work and study together, regardless of their differentness. At the same time, colleges and universities have traditionally been at the cutting edge of protection of our most cherished freedoms, most notably freedom of speech and non-violent action, which protect even unpopular or divisive ideas and perspectives. Such constitutionally-protected expression can contribute to an unwelcoming and even offensive social and educational environment for some individuals in the college community, particularly when it concerns race, religion, sex, sexual orientation, disability, national origin, or ethnicity, and the first amendment does not preclude colleges from taking affirmative steps to sensitize the college community to the effects of creating such a negative environment. Therefore, the Community Colleges recognize that they have an obligation not only to punish proscribed actions, but also to provide programs which promote pluralism and diversity and encourage the college community to respect and appreciate the value and dignity of every person and his or her right to an atmosphere not only free of harassment, hostility, and violence but supportive of individual academic, personal, social, and professional growth. Acts of racism or harassment directed against individuals or specific groups of individuals will not be tolerated and will be dealt with under the employee affirmative action grievance procedures and the student grievance and disciplinary procedures. Each college will provide a comprehensive educational program designed to foster understanding of differentness and the value of cultural diversity. This will include plans to (1) promote pluralism, (2) educate

the college community about appropriate and inappropriate behaviors to increase sensitivity and encourage acceptance, and (3) widely disseminate this policy statement to the entire college community.

#### **PEOPLE WITH DISABILITIES POLICY**

The Board of Regents of Community-Technical Colleges and all of the colleges under its jurisdiction are committed to the goal of achieving equal educational opportunity and full participation for people with disabilities in the Community Colleges. To that end, this statement of policy is put forth to reaffirm our commitment to ensure that no qualified person be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity on a Community College Campus or in the Central Office of the Board of Regents. The Board recognizes that a physical or functional impairment is a disability only to the extent that it contributes to cutting the person off from some valued experience, activity, or role. Higher education is therefore especially important to people with disabilities, since it aims to increase every student's access to valued experiences, activities, and roles. Improving access for students and employees means removing existing barriers that are physical, programmatic, and attitudinal; it also means taking care not to erect new barriers along the way. The efforts of the Community Colleges to accommodate people with disabilities should be measured against the goals of full participation and integration. Services and programs best promote full participation and integration of people with disabilities when they complement and support, but do not duplicate, the regular services and programs of the college. Achieving the goal of full participation and integration of people with disabilities requires cooperative efforts within and among institutions of higher education. The Board of Regents will work with the board of governors to achieve a higher level of services and appropriate delivery methods at all Connecticut Community Colleges. This statement is intended to reaffirm the Board's commitment to affirmative action and equal opportunity for all people and in no way to replace the equal opportunity policy statement.

#### AIDS AND OTHER COMMUNICABLE DISEASES POLICY

The Community College System reaffirms its commitment to provide a safe and healthy educational environment, safeguard the rights of individuals, and comply with state and federal anti-discrimination laws and regulations. Sound and compassionate legal, ethical, moral, and educational principles require that students and employees with AIDS, HIV infection, and other communicable diseases be accorded the same rights and assume the same responsibilities as all other members of the Community College community. It is recognized that the best method of allaying fears and promoting understanding is education: the dissemination of information based on fact and current scientific knowledge. People with AIDS and other communicable diseases shall be accorded the same rights as all other students and employees. State and federal laws and regulations prohibit discrimination against and harassment of individuals solely because of disability. No individual shall be discriminated against in any college programs, services, or employment solely because of his or her status as AIDS or HIV-infected or having any other communicable disease. Each college shall provide information and educational programs and activities concerning AIDS and other communicable diseases for students and employees. Such information and programs shall rely on the most current knowledge about such diseases and shall focus on how such diseases are and are not transmitted, how they can be prevented, and the rights of persons with such diseases. Each college president shall designate an individual responsible for coordination, delivery, and evaluation of the college AIDS education program. A committee representative of the college community should be involved in formulating educational and information activities. Restrictions shall not be placed on admission, programs, services, or employment offered to an individual on the basis of a diagnosis of AIDS, HIV infection, or other communicable disease, except in individual cases when it has been medically determined that there is risk of infection or danger to others or in programs from which individuals with specific communicable diseases are excluded by law or regulation. Colleges shall not require testing of students or employees for AIDS, HIV infection, or other communicable diseases for participation in employment, programs, or services of the college, except as required by law or regulation. Where possible, colleges shall maintain a listing of local referral sources for such testing and shall publish such listing with other educational information. All student or employee information related to inquiries, testing, and disclosure of AIDS, HIV, or other infection status shall be treated confidentially as all other health records. All reasonable steps shall be taken to protect the identity of an individual with AIDS. Students and employees involved in the direct delivery of health care services and those who might otherwise come in contact with blood and other body fluids (such as in science laboratories or allied health practica) shall at all times follow the guidelines regarding precautions to be taken in the handling of such fluids disseminated by the Department of Health Services (January 1987) or other approved guidelines. Violations of any part of this policy shall be dealt with under the appropriate disciplinary procedures for students or employees. This policy shall be published in all college catalogs and student handbooks and shall be made available to all employees.

## DRUGS AND ALCOHOL IN THE COMMUNITY COLLEGES POLICY

The Board of Regents of Community-Technical Colleges endorses the statement of the network of colleges and universities committed to the elimination of drug and alcohol abuse, which is based on the following premise: American society is harmed in many ways by the abuse of alcohol and other drugs - decreased productivity, serious health problems, breakdown of the family structure, and strained social resources. Problems of illicit use and abuse of substances have a pervasive effect upon many segments of society - all socio-economic groups, all age levels, and even the unborn. Education and learning are especially impaired by alcohol abuse and illicit drug use. The Board recognizes that education regarding alcohol and substance abuse is an appropriate and even necessary part of contemporary college life. Since the unauthorized use of controlled substances, in addition to the potential harmful effect it may have on students and employees, is contrary to state and federal law and regulation, it must be prohibited in any college activity, on or off the college campus. Although the conditions of alcohol and drug dependency may be considered disabilities or handicaps under state and federal law and regulation and Board of Regents policy, and employees and students will not be discriminated against because they have these disabilities, all students and employees are considered to be responsible for their actions and their conduct. These provisions shall apply to all colleges under the jurisdiction of the Board:

1. No student or employee shall knowingly possess, use, distribute, transmit, sell, or be under the influence of any controlled substance on the college campus or off the college campus at a college-sponsored activity, function, or event. Use or possession of a drug authorized by a medical prescription from a registered physician shall not be a violation of this provision.

2. All colleges shall develop and enforce policies regarding the sale, distribution, possession, or consumption of alcoholic beverages on campus, subject to state and federal law. Consistent with board policy, the consumption of alcoholic beverages on campus may only be authorized by written permission of the president for special events as appropriate.

3. All colleges shall provide educational programs on the abuse of alcohol and other drugs and referral for assistance for students and employees who seek it. Colleges are encouraged to establish campus-wide committees to assist in development of these programs in response to particular campus needs and identification of referral resources in their respective service planning regions. Failure to comply with this policy will result in invocation of the appropriate disciplinary procedure and may result in separation from the college and referral to the appropriate authorities for prosecution.

## **STUDENT RIGHTS POLICY**

#### **SECTION 1: RIGHTS OF STUDENTS**

It is the policy of the Board of Regents of Community-Technical Colleges that the educational offerings of the Community Colleges be available to students without regard to the individual's race, color, religious creed, sex, gender identity or expression, age, national origin, ancestry, present or past history of mental disability, genetic information, marital status, mental retardation, sexual orientation, learning disability, or physical disability, including, but not limited to, blindness, or prior conviction of a crime (unless the provisions of sections 46a-60(b), 46a-80(b), or 46a-81(b) of the Connecticut General Statutes are controlling or there is a bona fide educational qualification excluding persons in one of the above protected groups). With respect to the foregoing, discrimination on the basis of sex shall include sexual harassment as defined in Section 46a-60(8) of the Connecticut General Statutes. Further, the system will not discriminate against any person on the grounds of political beliefs or veteran status. Students are entitled to an atmosphere conducive to learning and to impartial treatment in all aspects of the teacher-student relationship. The student should not be forced by the authority inherent in the instructional role to make particular personal choices as to political action or his or her own part in society. Evaluation of students and the award of credit must be based on academic performance professionally judged and not on matters irrelevant to that performance, whether personality, race, religion, degree of political activism, or personal beliefs. Students are free to take reasoned exception to the data or views offered in any course of study, but they are responsible for learning the content of the course of study as defined by official college publications. Community College students are both citizens and members of the academic community. As citizens they enjoy the same freedom of speech, peaceful assembly, and right of petition that other citizens enjoy, and as members of the academic community they are subject to the obligations which accrue to them by virtue of this membership.



#### **SECTION 2: STUDENT GRIEVANCE PROCEDURE**

1. Definition: A grievance is an allegation by a student that, as to him or her, an agent of the college has violated board or college policies relating to students other than assignment of grades or other academic evaluation (see Section 3).

2. How to file a grievance: A grievance is to be submitted in writing to the dean of students or such other college official as the president may designate (hereinafter, the dean of students), within thirty days of the date the grievant knew or reasonably should have known of the alleged violation. The written grievance shall specify the right claimed to have been violated and state briefly the underlying facts.

3. Procedure for grievance resolution: The dean of students shall investigate the grievance and, within thirty days from the time the grievance was submitted recommend to the president a disposition of the grievance, except as provided hereinafter:

a. In the course of each investigation, the dean of students shall consult with the dean responsible for the area of college operations in which the grievance arose

b. In the case of a grievance alleging discrimination based on race, color, religious creed, sex, gender identity or expression, age, national origin, ancestry, present or past history of mental disorder, marital status, mental retardation or physical disability, prior conviction of a crime, political beliefs, veteran status, or sexual preference, the dean of students shall consult with the college's affirmative action person during the course of the investigation

c. In the case of a grievance against a dean, the grievance shall be filed with the president. The president may accept or reject the recommendation, or direct such further investigation as he or she deems appropriate. The president shall notify the student of the final disposition of the grievance within fifteen days of receiving the recommendation, except for good cause or as provided in number 4.

#### 4. Advisory Committee:

The president may establish an advisory committee of students and staff which may be charged with the responsibility of making recommendations at either the level of the deans or the president. The president may appoint and remove members of the committee. If an advisory committee is appointed, the president shall establish a reasonable time frame within which the committee must make recommendations.

#### **SECTION 3: REVIEW OF ACADEMIC STANDING**

A student may seek review of the assignment of a grade or other decision affecting academic status in accordance with the following procedure:

1. The grade or academic decision affecting academic status should be discussed informally with the instructor or official responsible for the decision within fifteen calendar days of the student's awareness of the decision.

2. If the matter is not satisfactorily adjusted within ten calendar days of this appeal or the instructor is not available, the student may refer the matter to the academic dean by filing a written appeal. The appeal must be filed with the academic dean within thirty calendar days of the student's awareness of the decision, which is being appealed. Upon receipt of such appeal, the dean shall meet with the instructor, if he or she is available, to determine that step 1 has taken place or is not possible and to receive relevant information from the instructor responsible for the decision. The dean may then refer the matter to the academic supervisor for informal consideration prior to step 3.

3. The academic dean or other designated official(s) shall afford review as provided below. The president may designate an official or an academic appeals committee to provide review at this step in lieu of the academic dean.

The student shall be afforded the right to present a statement of appeal and relevant information in support of it. It is the student's responsibility to show that the decision in question is arbitrary (i.e., without a reasonable basis) or was made for improper reasons in violation of section 1 of this policy. The student is entitled to a written response within thirty days of the completion of his or her presentation. A decision to change the grade or modify the decision, which has been appealed, is advisory to and subject to the approval of the president.

4. The foregoing decision may be appealed to the president by filing a statement of appeal within ten calendar days of the date of the decision. Review by the president shall be on the basis of the written record unless he or she decides that fairness requires broader review. The decision of the president shall be final.

5. The time frames provided herein may be modified by the president for good cause.

### **POLICY ON STUDENT CONDUCT**

#### SECTION 1: STUDENT CODE OF CONDUCT POLICY

#### **CLICK HERE TO VIEW THIS POLICY:**

http://www.threerivers.edu/president/policies/college\_policies\_shtml#StudentRights

## SEXUAL MISCONDUCT, SEXUAL ASSAULT AND INTIMATE PARTNER VIOLENCE POLICY

#### CLICK HERE TO VIEW THIS POLICY:

http://www.threerivers.edu/president/policies/bor-student-codeofconductpolicy.pdf

#### CAMPUS SECURITY POLICIES AND CRIME STATISTICS

In compliance with State of Connecticut Campus Safety Act, P.A. 90-259 and Public Law 101-542, Student Right to Know and Campus Security Act, Three Rivers Community College hereby publishes the following summary of institutional security policies and uniform crime reporting procedures. This information is intended to raise the awareness of all members of the College community to campus safety issues in hopes that this awareness will foster continued attention to and improved security for all college students and staff.

#### UNIFORM CAMPUS CRIME REPORT

Annually, each institution of higher education within the State is required to prepare a Uniform Campus Crime Report (UCCR),

which is consistent with the FBI's Uniform Crime Reporting System (UCR). The report is to reflect the crime statistics on the property of the institution for the preceding calendar year and covers crimes such as rape, assault, burglary, larceny, and arson.

#### DISTRIBUTION OF CRIME STATISTICS AND SECURITY REPORTS

These crime statistics and security reports are published in the student handbook. Copies of the student handbook are distributed annually to all students and employees. Prospective students and prospective employees will be advised of the availability of this information, a description of its contents, and information on how to obtain a copy. Information will be provided as requested. Copies of the crime report will also be on file in the library, in the office of each Dean, and on the College web site. The College is also required to monitor and report on any liquor law violations, drug abuse violations, and weapons violations occurring on each campus. Copies of these crime statistic reports are available upon request in the office of each Dean and in the library.

#### WEAPONS ON COLLEGE CAMPUSES POLICY

The use or possession of weapons (as defined in Section 53-206 of the Connecticut General Statutes) is prohibited on college campuses or at college activities except as authorized by Board or college policies. Colleges are hereby authorized to develop policies, which allow for specific exemptions to the extent permitted by law.

#### **SMOKING POLICY**

Smoking is permitted on Three Rivers Campuses only in specifically designated locations. Smokers may refer to the college web site for information about current locations or refer to signage posted at the college.

• Since the success of this program is largely dependent on the support of the entire college community, everyone, including smokers and non-smokers are asked to comply or assist with the following new rules:

• Do not smoke or use tobacco products in front of either main campus nor within 100 feet of any entrances or windows (unless in a specifically designated smoking area).

• To the fullest extent possible try to extinguish smoking materials before leaving your vehicle.

• Only light up and use tobacco products within the designated areas...not en-route to these locations.

• Dispose of used tobacco products only in the trash receptacles provided...not on the ground.

 If violations are noted, please remind students, staff or visitors involved about these new rules and about the location of authorized smoking areas.

• Please report any habitual or flagrant violations to any of the Three Rivers' management staff.

#### DISTURBANCES ON CAMPUS POLICY

In the interest of assisting in the preservation of academic freedom, including the important characteristics of access to sources of knowledge, freedom to reach unpressured conclu-

sions, and respect for freedom of movement, and the performance of responsibilities relating to this, the Board of Regents of Community-Technical Colleges sets forth the following policies to guide faculty, students, and administrators in cases of disruptions on campuses of the public Community Colleges of Connecticut.



1. College staff, faculty, and students shall be free to exercise their rights as professional staff, students, and citizens of the United States or as foreign nationals protected by the laws of the United States respecting those professionals and humane courtesies which contribute to the success of the academic community.

2. The president, staff, faculty, and students should work to maintain study and research of ideas and facts of humanity and the universe, lawful free assembly, access to sources of knowledge, and the freedom of staff to perform teaching and administrative functions.

3. The Board of Regents believes that activities as listed below and those akin to them might result in the need to take disciplinary action to maintain the right and opportunities for all segments of the campus community to learn and to teach and to administer:

a. occupying and preventing authorized use of facilities

b. damaging, removing, or destroying college property

c. preventing instruction, research, or other authorized activity by disorderly conduct and/or interfering with access to facilities

d. physically detaining or removing any person engaged in lawful and/or normal college functions

e. failing to comply with directives from college officials or law enforcement personnel issued in the performance of their duties.

#### **GENERAL ACADEMIC INFORMATION**

The following academic policies and standards for Three Rivers Community College were ratified for the merged institution in May, 1993. All policies are subject to change.

#### ACADEMIC ADVISING

All students admitted are assigned to an academic advisor. Advisors are members of the professional staff, usually full-time faculty members, whose backgrounds make them especially suitable to help students make academic and vocational choices. During the school year, the advisor helps the student select appropriate courses, based on the student's preference, previous records, and standardized test scores. The advisor also discusses with the student the course of action to be taken when the student is ready to leave Three Rivers Community College.

The advising system insures each student receives individual help with educational and vocational problems, provides each student with advice from a professional with expertise in a particular subject and enables the professional staff to interact with individual students in matters not directly related to classroom performance. Advising holds are placed on all students in their first year at TRCC. After participating in an advising session the hold will be removed allowing the student to register online or in-person.

Students should consult the following Master Advisor List, published each semester, to determine the name of their academic advisor:

Master Advisor List				
NAME	PROGRAM	OFFICE	<b>PHONE (860)</b>	E-MAIL
Albright, Judith	Nursing/Pre-Nursing	C-262	860-215-9400	JAlbright@TRCC.commnet.edu
Alikhanova, Larissa	Liberal Arts/General Studies	C-104	860-215-9401	LAlikhanova@TRCC.commnet.edu
Amenta, Kevin	Liberal Arts/General Studies	C-136	860-215-9402	KAmenta@TRCC.commnet.edu
Anderson, Allan	Computer Science	C-106	860-215-9403	AAnderson@TRCC.commnet.edu
Arrieta, Maria C.	Liberal Arts/General Studies	E-201	860-215-9404	MArrietta@TRCC.commnet.edu
Ashton, Teri	Nursing/Pre-Nursing	C-228	860-215-9405	TAshton@TRCC.commnet.edu
Barry, Todd	Liberal Arts/General Studies	D-203B	860-215-9406	TBarry@TRCC.commnet.edu
Bennett, Richard	Business Administration	D-209	860-215-9407	RBennett@TRCC.commnet.edu
Bergwell, Michael	Liberal Arts/General Studies	C-158	860-215-9408	MBergwell@TRCC.commnet.edu
Braza, Arthur	Accounting	C-114	860-215-9409	ABraza@TRCC.commnet.edu
Brescia, MaryAnn	Nursing/Pre-Nursing	C-226	860-215-9438	MBrescia@TRCC.commnet.edu
Bull, Michelle	Nursing/Pre-Nursing	C-220	860-215-9495	MBull@TRCC.commnet.edu
Burch, Marcie	Liberal Arts/General Studies	C-256	860-215-9410	MBurch@TRCC.commnet.edu
Carroll, Pamela	Liberal Arts/General Studies	C-116	860-215-9412	PCarroll@TRCC.commnet.edu
Carta, Michael	Liberal Arts/General Studies	C-168	860-215-9413	MCarta@TRCC.commnet.edu
Clampet, Irene	Marketing/Advertising	C-126	860-215-9414	IClampet@TRCC.commnet.edu
Colonghi, Pat	Nursing/Pre-Nursing	C-246	860-215-9477	PColonghi@TRCC.commnet.edu
Comeau, Mark	Architectural Design Tech	C-218	860-215-9415	MComeau@TRCC.commnet.edu
Copeland, James	Liberal Arts/General Studies	D-209	860-215-9416	JCopeland@TRCC.commnet.edu
Courtney, Daniel	Electrical Eng Technologies	C-134	860-215-9417	DCourtney@TRCC.commnet.edu
Crouch, Jeffrey	Criminal Justice	D-209	860-215-9418	JCrouch@TRCC.commnet.edu
Czarzasty, Nancy	Nursing/Pre-Nursing	C-244	860-215-9419	NCzarzasty@TRCC.commnet.edu
Decker, June	Liberal Art/General Studies	C-124	860-215-9420	JDecker@TRCC.commnet.edu

Master Advisor List

Master Ac	dvisor List			
NAME	PROGRAM	OFFICE	PHONE (860)	E-MAIL
DeFrance, Jennifer	Early Childhood Education	C-110	860-215-9421	JDefrance@TRCC.commnet.edu
Delaney, Terry	Liberal Arts/General Studies	C-118	860-215-9422	TDelaney@TRCC.commnet.edu
Donnelly, Judith	Gen. Engin. Tech/Photonics	C-272	860-215-9423	JDonnelly@TRCC.commnet.edu
Dopirak, William	Liberal Arts/General Studies	C-130	860-215-9424	WDopirak@TRCC.commnet.edu
Edmondson, Peter	Hospitality Management	C-132	860-215-9425	PEdmondson@TRCC.commnet.edu
lick, Larry	Business Admin./Small Business	C-172	860-215-9426	LFlick@TRCC.commnet.edu
Garcia, Aida	All Curricula	A-120	860-215-9244	AGarcia@TRCC.commnet.edu
Gentry, Michael	Manufacturing Engineer Tech	C-154	860-215-9428	MGentry@TRCC.commnet.edu
Gladue, Betti	Business Information Systems	C-138	860-215-9430	BGladue@TRCC.commnet.edu
Graham, Joan	Nursing/Pre-Nursing	C-222	860-215-9431	JGraham@TRCC.commnet.edu
Gray, Kathleen	All Curricula	A-119	860-215-9248	KGray@TRCC.commnet.edu
Greenier, Ronald	Computer Aided Drafting	C-140	860-215-9432	RGreenier@TRCC.commnet.edu
lagen, Janet	Liberal Arts/General Studies	C-216	860-215-9433	JHagen@TRCC.commnet.edu
lammond, Christine	Liberal Arts/General Studies	D-209	860-215-9434	CHammond@TRCC.commnet.edu
larding, G. Kent	Business Administration	C-148	860-215-9435	GHarding@TRCC.commnet.edu
ławes, Susan	Liberal Arts/General Studies	C-122	860-215-9437	SHawes@TRCC.commnet.edu
askiewicz, Brenna	All Curricula	A-110	860-215-9253	BJaskiewicz@TRCC.commnet.edu
eknavorian, Sandra	Liberal Arts/General Studies	C-152	860-215-9439	SJeknavorian@TRCC.commnet.edu
ohnson, Joseph	Computer Science Technology	C-162	860-215-9440	JJohnson@TRCC.commnet.edu
Cennedy, Brian	Liberal Arts/General Studies	C-156	860-215-9441	BKennedy@TRCC.commnet.edu
erop, Adam	Fire Technology & Admin.		860-885-2663	AKerop@TRCC.commnet.edu
Cerouack-Warner, Pamela	Liberal Arts/General Studies	D-205W	860-215-9442	PKerouack-Warner@TRCC.commnet.e
ƙhan-Bureau, Diba	Civil/Env. Engineering Tech.	C-264	860-215-9443	DKhan-Bureau@TRCC.commnet.ed
nowles, Fredrick	Liberal Arts/General Studies	C-120	860-215-9444	FKnowles@TRCC.commnet.edu
Knowles, Patrick	Mech/Mfg Engineer Tech.	C-160	860-215-9445	PKnowles@TRCC.commnet.edu
Kugelmass, Dov	Liberal Arts/General Studies	C-164	860-215-9446	DKugelmass@TRCC.commnet.edu
amondy, Anne	Nursing/Pre-Nursing	C-212	860-215-9447	ALamondy@TRCC.commnet.edu
.eask, Ronald	Computer Science	C-170	860-215-9448	RLeask@TRCC.commnet.edu
iscum, Matthew	All Curricula	A-124	860-215-9265	MLiscum@TRCC.commnet.edu
.ong, Jennifer	Liberal Arts/General Studies	C -252	860-215-9450	JLong@TRCC.commnet.edu
Aartin, Joyce	Human Services	C-204	860-215-9451	JMartin@TRCC.commnet.edu
Naurice, Barbara	Liberal Arts/General Studies	C-206	860-215-9452	BMaurice@TRCC.commnet.edu
Aayer, Phillip	Liberal Arts/General Studies	C-208	860-215-9453	PMayer@TRCC.commnet.edu
AcNamara, Ann	Liberal Arts/General Studies	C-166	860-215-9454	AMcNamara@TRCC.commnet.edu
Aolkenthin, Kelly	Liberal Arts/General Studies	C-234	860-215-9455	KMolkenthin@TRCC.commnet.edu
Auenzner, Edwin	Accounting	C-144	860-215-9456	EMuenzner@TRCC.commnet.edu

# Master Advisor List

NAME	PROGRAM	OFFICE	PHONE (860)	E-MAIL
Neufeld, Steven	Liberal Arts/General Studies	C-142	860-215-9457	SNeufeld@TRCC.commnet.edu
Niedbala, Robert	Liberal Arts/General Studies	C-224	860-215-9458	RNiedbala@TRCC.commnet.edu
O'Hare, Will	Liberal Arts/General Studies	C-202	860-215-9436	WHare@TRCC.commnet.edu
O'Reilly, Kathleen	Liberal Arts/General Studies	D-205W	860-215-9459	KOReilly@TRCC.commnet.edu
Ouellet, Edith	Nursing/Pre-Nursing	D-111	860-215-9460	EOuellet@TRCC.commnet.edu
Pascal, D. Don	Liberal Arts/General Studies	E-205	860-215-9461	DPascal@TRCC.commnet.edu
Patsouris, Peter	Liberal Arts/General Studies	C-108	860-215-9462	PPatsouris@TRCC.commnet.edu
Rafeldt, Lillian	Nursing/Pre-Nursing	C-230	860-215-9463	LRafeldt@TRCC.commnet.edu
Rhoades, James	Electrical Engineering Tech.	C-232	860-215-9464	JRhoades@TRCC.commnet.edu
Rich, John	All Curricula	A-128	860-215-9285	JRich@TRCC.commnet.edu
Ricker, Nicola	Liberal Arts/General Studies	C-270	860-215-9474	NRicker@TRCC.commnet.edu
Rutherford, David	Liberal Arts/General Studies	D-203B	860-215-9465	DRutherford@TRCC.commnet.edu
Rymut, Nancy	Nursing/Pre-Nursing	A-236	860-215-9466	NRymut@TRCC.commnet.edu
Samuelson, Leslie	Liberal Arts/General Studies	C-238	860-215-9467	LSamuelson@TRCC.commnet.edu
Sauter, Patricia	Criminal Justice	C-240	860-215-9468	PSauter@TRCC.commnet.edu
Scarborough, Chris	All Curricula	A-119	860-215-9289	CScarborough@TRCC.commnet.edu
Scrivano, Nancy	Nursing/Pre-Nursing	C-242	860-215-9469	NScrivano@TRCC.commnet.edu
Sebastian, Deirdre	Non Degree Programs	A-126	860-215-9290	DSebastian@TRCC.commnet.edu
Selke, Sarah	Liberal Arts/General Studies	C-214	860-215-9470	SSelke@TRCC.commnet.edu
Selvaggio, Joseph	Liberal Arts/General Studies	C- 268	860-215-9471	JSelvaggio@TRCC.commnet.edu
Shaw, Maria	Library Technology			MShaw@TRCC.commnet.edu
Sherrard, James	Nuclear Engineering Tech.	C-210	860-215-9472	JSherrard@TRCC.commnet.edu
Short, Wanda	Engineering Technologies	C-128	860-215-9473	WShort@TRCC.commnet.edu
Skahan, Sheila	Early Childhood Education	C-250	860-215-9475	SSkahan@TRCC.commnet.edu
Skiba, Jean	Liberal Arts/General Studies	C-266	860-215-9476	JSkiba@trcc.commnet.edu
Spaziani, Rhonda	All Curricula	F-211	860-215-9293	RSpaziani@TRCC.commnet.edu
St. Clair, Pamela	Liberal Arts/General Studies	D-205W	860-215-9478	PStClair@TRCC.commnet.edu
Stutz, Michael	Liberal Arts/General Studies	C-112	860-215-9479	MStutz@TRCC.commnet.edu
Tisch, Roxanne	Liberal Arts/General Studies	C-248	860-215-9480	RTisch@TRCC.commnet.edu
Topping, Susan	Liberal Arts/General Studies	C-254	860-215-9481	STopping@TRCC.commnet.edu
Volkov, George	Computer Science Technology	C-258	860-215-9483	GVolkov@TRCC.commnet.edu
Wallett, Francine	Nursing/Pre-Nursing	C-260	860-215-9484	FWallett@TRCC.commnet.edu
Wichser, Meg	All Curricula	A-108	860-215-9304	MWischer@TRCC.commnet.edu
Zenie, Heidi	Exercise Science/Rec. & Leisure	C-102	860-215-9485	HZenie@TRCC.commnet.edu

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THE FOLLOWING ACADEMIC POLICIES AND STANDARDS FOR THREE RIVERS COMMUNITY COLLEGE WERE RATIFIED FOR THE MERGED INSTITUTION IN MAY, 1993. ALL POLICIES ARE SUBJECT TO CHANGE.

#### **PLAN OF STUDY**

A Plan of Study is a worksheet that outlines the course requirements for a specific Three Rivers degree or certificate program. Students enrolled in a degree or certificate program must obtain a Plan of Study during their first semester to use as a planning guide for future course selection and registration. During the first semester of enrollment, a student meets with his or her academic advisor and reviews the program requirements. A student obtains a Plan of Study, has their advisor sign it, and retains it as an academic planning guide. Advising appointments are typically scheduled each semester just before early registration for continuing degree or certificate students, but can also be scheduled at other times during each semester. The original Plan of Study is kept by the student to record course completions and selections for registration each semester. Students who have not completed a Plan of Study and students who wish to amend or change their program should make an appointment with their advisor and complete and submit a Program/Advisor Change form.

Both students and advisors may request reassignment when a favorable relationship is not achieved by submitting a Program/ Advisor Change form.

#### **CHANGE OF PLAN OF STUDY**

Students who find they must change their plan of study should see their academic advisor or a counselor before beginning the next semester. In making such a change, credit for already completed courses may not be required in the new curriculum. Students are cautioned to check the requirements for the new curriculum, or graduation may be delayed because of the change. There are some programs that limit enrollments; students should ensure they are not changing into one of these without advising. Students who change their plan of study must complete and submit a Program Change Request form.

#### ATTAINING ACADEMIC CREDIT UNIT OF CREDIT

The credit hour is the unit of academic credit earned at Three Rivers. A course yielding three hours of credit typically requires 45 hours of classroom time.

#### **RESIDENCE REQUIREMENT**

Twenty-five percent (25%) of the total credits applicable to an associate degree or certificate must be taken at Three Rivers. Transfer credit from other colleges and non-traditional credit does not apply to the residency requirement. Non-traditional credit includes CLEP, DSST, Challenge Exams, Military Service Schools and Assessment of Prior Learning. No more than 50% of the required credits in any program can be non-traditional.

#### **COURSE LOAD**

Students are usually not permitted to register for more than 18 hours of credit per semester in liberal arts and career programs. Students in technical programs may register for up to 21 credits. Some students are advised to limit their course load to 9 credits or less for academic reasons. Students wishing to exceed the credit load limits may take one additional course with the approval of the Academic Dean.

#### VARIABLE CREDIT

A student receives, as a total of credits in a variable credit course, no more than the maximum number of credits for which the course is offered. Generally, variable credit is awarded only for independent study, work experience or field work, with the approval of the Academic Dean.

#### **DEVELOPMENTAL STUDIES**

The College offers developmental courses in reading, writing, and math. These courses are designed to help students whose academic skills need improvement before they take required courses in their programs of study. All developmental classes provide support and concentrate on the specific skills students need for academic success. Areas of emphasis for each course are covered under course descriptions.

#### FIRST YEAR EXPERIENCE

This three-credit course is designed to help new college students meet the expectations of college life. Prerequisite(s) for the course require completion of ESL\* K060 and ESL\* K061, if appropriate.

For additional information regarding the First Year Experience, refer to the http://www.trcc.commnet.edu/Div\_academics/ LearningInitiatives/FYE/FYE.shtml.

#### **INDEPENDENT STUDY**

In specific areas sanctioned by the College, the College offers a program of independent study. Topics vary with the student and the subject. The student works with the approval and under the direct supervision of a faculty member specifically qualified in the area of the student's interest. Independent study courses are by written contract between the student and the instructor. Independent study contract forms are available only from the Office of the Academic Dean. Completed independent study forms must be submitted to the Office of the Academic Dean for approval.

#### PRACTICUM

In subjects approved by the faculty and relevant to a student's program, academic credit may be granted for practical experience that enhances performance, requires the application of learning, or integrates theory and practice. Work experience in practicum courses is always accompanied by seminar sessions

or meetings with the faculty, formal reading and/or writing assignments and evaluation of academic as well as work performance.

For more information about practicums, refer to http://www. trcc.commnet.edu/Div\_academics/Admin/ExpLearn/ExperientialLearning.shtml.

#### STUDY ABROAD

TRCC offers students the opportunity to earn academic credit while studying abroad through CCIS-the College Consortium for International Studies. CCIS offers a broad spectrum of programs in over 30 countries, ranging in length from a summer term to a full year. Studying Abroad can enhance a student's academic experience and improve their career options. Students may even be able to use Financial Aid and should contact the Financial Aid office to determine eligibility. For additional information about studying abroad, contact Professor Maria Celeste Arrieta at: MArrieta@trcc.commnet.edu.

#### **RECEIVING CREDIT BY TRANSFER**

Students seeking Credit by Transfer are responsible for providing OFFICIAL records from their transferring institution, including college transcripts, military records, and external examination score reports. OFFICIAL records must be sent directly from the transferring institution to the College's Registrar's Office. Hand-carried documents, although useful at an initial admissions conference, are not accepted for official evaluation of transfer credit.

Credit by Transfer is normally evaluated during the semester in which the student is admitted (or readmitted) and registered as a degree-seeking student. Once the transfer credits are evaluated, the student receives a course history report from the Associate Registrar showing the credits as evaluated. Students are advised to consult with their academic advisor for the application of this transfer credit to the student's particular Plan of Study.

Students planning to graduate, who are not currently registered, are advised to request transfer evaluation of credits needed to complete graduation requirements (which are not reflected on the student's transcript).

For most programs of study there is no time limit on previously earned credits in transfer. However some courses in the Technical and Nursing degrees must be within five years to apply to the degree. Students are reminded that acceptance of all transfer credit is at the discretion of the College.

#### ACCEPTANCE OF TRANSFER CREDIT AT COMMUNITY COLLEGES:

Connecticut State Colleges and Universities (ConnSCU) - Board of Regents for Higher Education Policy:

#### **1. CREDIT FROM OTHER COLLEGIATE INSTITUTIONS**

At all the community colleges, degree and certificate credit shall be granted only for credit courses completed at all institutions within the Connecticut state system of higher education and at all other collegiate institutions accredited by an agency recognized by the Council for Higher Education Accreditation as either a Regional Accrediting Organization or a Specialized and Professional Accrediting Organization in accordance with the following:

> a. Degree and certificate credit shall be granted for all credit courses that are applicable to the objectives of, or equivalent to the course requirements of the curriculum in which the transferring student enrolls. Credit work that is not applicable or equivalent to curriculum requirements shall be accepted for credit at the discretion of the College. Degree and certificate credit shall also be granted on the basis of performance on examinations in accordance with standards and limits approved by the Connecticut State Colleges and Universities (ConnSCU) - Board of Regents for Higher Education.

b. Degree and certificate credits shall be granted for credit courses completed with a letter grade of "C-minus" or better, or with a grade of "P" (Pass) with the following exceptions: all technology programs and the Nursing Program where a "C" grade or better is required. Such credit courses shall be accepted only for credit, and letter grades assigned by other institutions shall not be recorded or included in computations of student grade point averages.

c. Notwithstanding the number of degree credits which shall be granted in accordance with the foregoing, the student must complete at least twenty-five percent (25%) of the minimum credit requirements for the degree or certificate requirements through course work at the college awarding the degree or certificate.

d. When a student seeks transfer credit for technical or specialty courses into a program that is also accredited by a national or regional specialized accrediting agency such credits must be from a comparably accredited program. In the case of a request for transfer credit for technical or specialty courses from a non-specialty accredited program, the college shall provide appropriate means for the validation of the student's competency in the technical specialty course areas. TAC/ABET-accredited programs, such technical specialty credits should be from TAC/ABETaccredited programs.

# 2. CREDIT FOR RECOGNIZED COURSES FROM NON-COLLEGIATE ORGANIZATIONS

Students who have completed courses sponsored by employers, government agencies, labor unions, and professional associations may be eligible for transfer credit. The award of credit is based on the recommendations in the American Council on Education's (ACE) National Guide to Credit Recommendations for Noncollegiate Courses, The National Program on Noncollegiate Sponsored Instruction's (PONSI) College Credit Recommendations, and Charter Oak State College's Connecticut Credit Assessment Program Course Reviews.

> a. Credit may be awarded for military training, ratings and occupational specialties as recommended in the ACE Guide to the Evaluation of Educational Experiences in the Armed Services.

b. Credit may also be awarded for work completed in specific areas at non-collegiate institutions if formal approval has been sought and granted by the Connecticut Community Technical Colleges Chancellor's Office and the Connecticut Department of Higher Education. Only an institution may apply for recognition of non-collegiate work, not an individual student.

#### 3. COMPLETING DEGREE REQUIREMENTS AT OTHER COLLEGES

Students enrolled in a degree program who wish to complete Three Rivers' degree requirements at other colleges or universities should request approval, when possible, from their advisor before undertaking such work. This procedure is referred to as "reverse transfer."

#### **4. CREDIT BY EXAMINATION**

Credit by examination may be recognized if applicable to the degree or certificate program in which a student is enrolled. Any credit earned by examination is recorded on the student's transcript as semester hours but without grades and grade points.

a. External Examinations

Three Rivers awards credit for College Level Examination Program (CLEP) and DSST Standardized Tests according to the applicable college policy, which is based on the American Council on Education's credit recommendations.

The college policy for awarding credit in the foreign languages follows: Students can receive academic credit for proficiency in the languages offered at Three Rivers (French and Spanish). They can receive up to six academic credits for proficiency in Elementary French I and II and Elementary Spanish I and II by taking the CLEP standardized test. If the student's CLEP score entitles him or her to twelve credits, the additional six credits will be awarded as Language Electives. Or, if they wish, they may receive academic credit for Intermediate Spanish I and II and Intermediate French I and II (third and fourth semester Spanish and French) by taking an institutional exam. CLEP and DSST tests are administered at Three Rivers during the fall and spring semesters. Contact the Student Development Office for information about this program.

#### b. Internal (Challenge) Examinations

In specific areas sanctioned by the College, a student may, on the basis of previous study and experience and at the discretion of the department chairperson involved, take a special examination for credit for a course without having enrolled in that course. The student is not permitted to earn credit by examination in a course in which he or she has already received a grade or if there is a standardized exam in that course.

#### 5. ADVANCED PLACEMENT EXAMINATIONS

Three Rivers also grants credit for Advanced Placement Examinations of the College Examination Entrance Board with scores of 3 or above according to current college policy.

# 6. CREDIT FOR PRIOR LEARNING THROUGH PORTFOLIO DEVELOPMENT

#### (THE ASSESSMENT OF PRIOR LEARNING PROGRAM)

Students who plan to apply for such credit must enroll in a fourcredit course entitled COU K122: Portfolio Development. The student develops a portfolio in which he or she describes the learning acquired through prior experiences, specifies learning outcomes, provides appropriate documentation, and requests college credit for that learning. An Assessment Committee made up of faculty and professional staff reviews and evaluates the portfolio and then determines how many credits the student should receive. The credits gained through this evaluation process are applicable towards an associate degree at Three Rivers. A minimum of 25% (15 credits for career programs and 17 credits for technology programs) must be granted in residence by Three Rivers.

No credit shall be awarded via portfolio review outside of the subject areas encompassed by the approved curricula of the institution. No more than 50 percent of the credits required for a degree can be satisfied through non-traditional learning. Non-traditional learning includes credit for prior learning, challenge exam and military credit.

# TRANSFER TO BACHELOR'S DEGREE PROGRAMS

With advance planning, a student who earns an associate degree in one of Three Rivers' transfer programs can transfer to a bachelor's degree program and begin upper division work immediately.

Students who plan to transfer should confer with their academic advisor or a counselor early in their college enrollment to ensure that their course selections parallel as closely as possible the first and second year requirements of the transfer college or university. It is especially important to consult with an advisor/ counselor when choosing electives.

Three Rivers Community College has a number of specific transfer articulation agreements with public and private colleges and universities. These articulation agreements are typically written on a program/curriculum basis, providing the potential transfer student with specific course equivalencies.

Up-to-date information about course selection and program planning for transfer to Connecticut State Universities, the University of Connecticut, and many private colleges and universities is available in the Student Development Center or from a counselor.

#### **CONNECTICUT COLLEGE OF TECHNOLOGY**

The Connecticut College of Technology is a concept rather than a physical college. There are two discrete plans: a preengineering plan and a pre-technology plan. After successfully completing the specific curriculum requirements, the student will be accepted into an engineering program at the University of Connecticut or a technology program at Central Connecticut State University with advanced placement status. For more information about these programs please contact the Admissions Office or refer to the Technologies web page http://www. trcc.commnet.edu/Div\_academics/Technologies/technologies. shtml for specific information and course availability.

#### **CONNECTICUT STATE UNIVERSITIES**

Graduates of the Connecticut Community Colleges with a grade point average of 2.0 or higher are guaranteed admission to the university of their choice within the Connecticut State University System.

Community College graduates admitted to the Connecticut State University of their choice shall be given the same consideration for admission to specific majors and admitted on the same terms as students who began their studies at the university. In the case of majors for which articulation agreements have been adopted, Community College students preparing for transfer should follow the terms of the articulation agreement regarding course prerequisites, grade point averages, and other requirements stated in the agreement.

Graduates of the Community College will be admitted as juniors and will be expected to complete two years of full-time (or equivalent part-time) study at the university to be eligible for the bachelor's degree.

Graduates of the Community College must make application by the date and on the forms prescribed by the university, including the submission of all the required transcripts, documents, and fees.

#### **HONORS PROGRAM**

The Three Rivers Community College Honors Program is designed to provide academically talented and motivated students an opportunity to develop their intellectual skills through challenging work that emphasizes critical and analytical thinking. In addition to developing advanced academic skills, students enrolled in the Honors program will benefit from the following:

- Honors designation on transcripts
- Invitation to special events and programs
- Personal letters of recommendation

Students who graduate from the program may also be eligible for:

- Honors recognition at Commencement
- Honors Diploma
- Honors Alumni activities

In addition, it is the intent of the program to develop articulation agreements with private and state colleges / universities.

#### **ADMISSION REQUIREMENTS:**

A student wishing to participate in the Honors program must have a 3.5 high school cumulative GPA or a 3.5 college GPA based on a minimum of 12 credit hours. Two letters of recommendation must accompany the application, followed by a personal interview with the program coordinator and/or the program advisory panel. In addition, students must score at the MAT\* K137/ENG\* K101 level of the placement exams or have successfully completed those courses. Students may enter the program at the start of any semester and must maintain a minimum 3.5 GPA in order to remain in good standing.

#### **PROGRAM REQUIREMENTS:**

Any student who meets the acceptance criteria may participate in the program. However, those who intend to graduate from the program must fulfill the following:

- Complete the requirements for an Associate's Degree with a minimum 3.5 GPA
- Complete 4 Honors Contracts (minimum of 12 credits) with grade of B+ or higher

#### **CLASS ATTENDANCE POLICY**

Instructional staff assigned to all sections of credit bearing courses at Three Rivers are required to take attendance at each class meeting and retain accurate records of attendance for at least three calendar years. The manner in which attendance is taken is determined at the professional discretion of the instructor. In certain instances, these records are furnished to the Financial Aid Office, Veterans Affairs office, Employer sponsors and the International Student advisor.

#### ADMINISTRATIVE NOTATIONS AND GRADE POINTS FOR COURSES

At the end of each semester, students receive grades in every course in which they are enrolled. Grades represent various levels of accomplishment. Except for developmental courses, grades carry certain "grade points", which are numerical expressions used to determine each student's academic standing. The following table lists the grades used and their corresponding grade points.

Grade	Grade Points	Definition
А	4.0	Excellent
A-	3.7	
B+	3.3	
В	3.0	Good
B-	2.7	
C+	2.3	
С	2.0	Satisfactory
C-	1.7	
D+	1.3	
D	1.0	Poor
D-	0.7	
F	0.0	Unsatisfactory

#### NON-ACADEMIC GRADES (NO GRADE POINTS) AU AUDIT

An administrative transcript notation for students auditing a course. Students not wishing credit may audit a course. This status will allow them to participate in class activities without being required to meet the examination requirements of the course. Students may ask to have papers critiqued, but faculty members are not required to grade an auditor's course work. Full tuition and fees are charged for courses audited. A student who wishes to audit a course must request this within the first four weeks of the course, using such a forms and procedures as the college may prescribe. Students auditing a course may not change to credit status.

#### **I INCOMPLETE**

A temporary grade assigned by the faculty member when course work is missing and the student agrees to complete the requirements. The student and instructor both must sign a contract to permit an "incomplete" grade. The contract will denote what must be completed to resolve the "I" grade. The "I" must be resolved by the end of the 10th week of the next full academic semester (except summer) or it automatically converts to an "F" or "F#" for remedial courses.

#### N NO GRADE

The N Grade is assigned to students when there is no basis for a grade. This would apply to students who never came to class as

well as to those who didn't attend or participate long enough to be graded. The N grade is used to distinguish between earned failures (F), official withdrawal (W) and students who stop attending or participating before there is a basis for a grade.

#### P PASS

An administrative transcript notation for successful completion of courses taken on a pass/fail basis. Pass ("P") is a final grade awarded to a student who elects the P/F Option prior to the end of the 10th week of the fall or spring semester or prior to the completion of two-thirds of a summer session or module course. The "P" is not figured in the Grade Point Average, but it does count as a course attempted. The "F" is figured in the Grade Point Average. The Pass/Fail Option is not available for use on courses to be applied toward a technology degree or for courses in the Nursing Program. The P/F option is irrevocable.

#### **TR TRANSFER**

An administrative transcript notation in lieu of grade for courses accepted for credit completed at all institutions within the Connecticut state system of higher education and at all other regionally accredited collegiate institutions in accordance with policy adopted by the Connecticut State College and Universities (CONNSCU) Board of Regents for Higher Education.

#### W WITHDRAWAL

An administrative transcript notation used to indicate that a student is withdrawn from a course in accordance with the procedures prescribed by the college. Students may withdraw, in writing or by phoning the Registrar's Office directly, for any reason until the end of the 13th week of classes. Financial aid students withdrawing from any courses are advised to notify the Financial Aid office to understand the consequences of withdrawing.

For additional information pertaining to withdrawals please see the section on Academic Misconduct.

#### GRADES FOR DEVELOPMENTAL COURSES

Developmental courses do not carry grade points, and the credits assigned to these courses do not count towards the required credits necessary for graduation.

Developmental courses are graded A#, A-#, B+#, B#, B-#, C+#, C#, C-#, D+#, D#, D-#, P# and F# are not calculated in the Grade Point Average.

Grades received and credits earned or not earned in developmental courses do not affect graduation honors in any way, positively or negatively. Credits received in developmental courses do not count towards graduation and consequently cannot be applied towards the 25% minimum residency requirement.

#### **GRADES FOR CREDIT-FREE COURSES**

CS Completed satisfactorily, eligible for CEU as assigned.

CU Completed unsatisfactorily, not eligible for CEU award. CX Course not completed by student.

CN Indicates no grade assigned by instructor.

#### REPEATED COURSES

Effective Fall 2002, the repeat policy is: No course may be repeated more than twice. The highest grade received will be used in calculating the student's academic average. This does not apply to those courses that are designed to be repeated for additional credit.

From Fall 1995 through Summer 2001, the repeat policy was: a student may repeat any course, regardless of the grade received. In every instance, the last grade received will become the valid grade for computation of the Grade Point Average (GPA). All grades still appear on the transcript, with the annotation "E" for excluded after the first attempted course grade. The meaning of "E" is that the grade points associated with the grade have been excluded from the GPA calculation. Credit for any given course is awarded only once.

For the benefit of all students who repeated courses during the period of Fall 1993 through Summer 1995, the earlier restriction on repeating courses graded "C" or better has been removed. The revised policy of unrestricted repeats introduced with the Fall 1995 semester has been applied retroactively to those students who received an unauthorized repeat symbol instead of an earned grade for the repeated course. Affected students will now receive the highest grade earned for the course and the associated grade points will be used in the calculation of the cumulative GPA. Any students negatively impacted by the retroactive change in policy may petition the Academic Dean for individual review of their academic record.

#### **THE GRADE POINT AVERAGE (GPA)**

The GPA is used to determine a student's standing in his or her class and in the College generally. Total grade points for a semester are calculated by multiplying the grade points allocated to each letter grade times the number of credits (in semester hours) assigned to each course attempted. The GPA is calculated by dividing the total number of grade points by the total number of credits earned, either in one semester or over the student's entire college career.

For example:

Course	Grade	Credits		Points Per (	Credit
MAT* K137	В	3	Х	3.0 =	9.0
ENG* K10	A-	3	Х	3.7 =	11.1
PSY* K111	С	3	Х	2.0 =	6.0
BIO* K121	А	4	Х	4.0 =	16.0
13 42.1					
This student's GPA would be 3.24 (42.1 divided by 13).					

#### **STANDARDS OF PROGRESS**

#### ACADEMIC PROGRESS STANDARD #1 -ACADEMIC STANDING (ASTD)

Beginning with Fall 2004, academic standing is calculated based on cumulative GPA hours (rather than attempted hours) and the student's overall GPA. Courses with the # and ^ sign and N, W, I, AU (Audit), and P (Pass) are excluded from the calculation.

<b>Cumulative GPA Hours</b>	Overall GPA	Academic Standing
0.5 – 11.99	1.5 – 4.0	Good Standing
0.5 – 11.99	0.0 - 1.49	Written Warning
12 - 30.99	1.7 - 4.0	Good Standing
12 - 30.99	0.0 - 1.69	Academic Probation
31 - 999.99	2.0 - 4.0	Good Standing
31 - 999.99	0.0 - 1.99	Academic Probation

Students who have been placed on academic probation for one semester and who have not attained the overall GPA to move back into good standing will be placed on suspension.

#### ACADEMIC PROGRESS STANDARD #2 -PROGRESS EVALUATION (PREV)

Progress evaluation is based on the satisfactory completion of a minimum of 50% of all credits (not courses) taken at the college. Courses that have been graded or that carry the following annotations will be counted as non-completions: F, F#, W, N and N#.

The progress evaluation percentage is calculated as follows: (Total cumulative credits minus credits that have been graded as non-completions) divided by total cumulative credits For example, if a NEW student takes four three-credit courses this fall and receives grades of C, B, F and W, then the calculation will be: (12-6) divided by  $12 = \frac{1}{2}$  or 50%. The student will be in good standing because they have successfully completed a minimum of 50% of total credits.

#### **COMBINED ACADEMIC STANDING**

Effective with Fall 2004 grading, the combined academic standing will determine whether a student can continue taking courses for the next term with no restrictions (Good Standing), with a limited credit load (Probation) or if the student is suspended from taking any classes for the minimum of one term. The possible permutations of Academic Standing and Progress Evaluation descriptions and the resultant combined academic standing are shown below.

Academic Standing + Progress Evaluation = Combined Academic Standing

Academic Standing	<b>Progress Evaluation</b>	Combined Academic
Good Standing	Good Standing	Good Standing
Good Standing	Probation	<b>Progress Probation</b>
Written Warning	Good Standing	GPA Written Warning
Written Warning	Probation	Warning & Progress
		Probation



Academic Probation Academic Probation

Academic Suspension Academic Suspension Good Standing GPA Probation Probation GPA & Progress Probation Good Standing GPA Suspension Probation Progress

GPA Suspension Progress Probation & GPA Suspension

Students who fail to regain satisfactory academic progress at the conclusion of the GPA Probation semester will be subject to GPA Suspension. Suspension can result in ineligibility to return to the college for a minimum of one semester.

Students placed on academic probation or suspension who believe extenuating circumstances affected their performance, including financial aid recipients who have their funding suspended due to unsatisfactory academic progress, may submit a written letter of appeal to the Academic Dean.

#### ACADEMIC WARNING, PROBATION AND SUSPENSION POLICY

• Satisfactory academic progress will be evaluated by the College when a student is registered at Three Rivers (including all registered courses at former Mohegan Community College and Thames Valley State Technical College).

• Students who have completed 11 or fewer credits whose Cumulative Grade Point Average (CGPA) falls below 1.5 will be given a Written Warning.

• Students who have completed between 12 and 30 credits inclusive whose CGPA falls below 1.7 and those who have completed 31 or more credits whose CGPA falls below 1.9, will be given a written notice that they are placed on Academic Probation. Students will receive written notification of the academic probation status and will be required to reduce their registered course load for the next enrollment period. Financial Aid recipients placed on academic probation will also have their funding suspended until they regain satisfactory academic progress.

• Students who fail to regain satisfactory academic progress at the conclusion of the Academic Probation Semester will be subject to Academic Suspension from the College for a minimum of one semester.

• Students placed on Academic Probation or Suspension who believe extenuating circumstances affected their performance, including financial aid recipients who have their funding suspended due to unsatisfactory academic progress, may submit a written letter of appeal to the Academic Dean.

#### REINSTATEMENT OF SUSPENDED STUDENTS

Suspended students who are reinstated to the College must satisfactorily complete all course work and achieve a minimum

semester grade point average of 1.7 or higher each semester following their reinstatement until they regain satisfactory academic standing. Students who do not meet these criteria shall again be subject to suspension from the College. Subsequent reinstatement requests must be submitted to the Academic Dean.

#### ACADEMIC HONORS SEMESTER HONORS

1. Full-time students who are matriculated in a certificate or degree program and who successfully complete 12 or more credits of work in a semester with a grade point average of 3.4 or higher shall be recognized by having their names placed on a Dean's List.

2. Part-time students who are matriculated in a certificate or degree program are also eligible for such recognition when they have completed 12 or more credits of work with a cumulative grade point average of 3.4 or higher. They may be subsequently recognized at the completion of an additional 12 or more credits of work with a cumulative grade point average of 3.4 or higher, and at successive intervals of 12 credits.

3. A course Withdrawal or Incomplete shall make the student ineligible for Dean's List recognition that semester. Upon completion of the Incomplete, the student may be recognized retroactively.

4. Students who are in a probationary status are not eligible for Dean's List recognition, even if their cumulative grade point average might otherwise make them eligible.

#### **GRADUATION HONORS \***

Students with an exemplary academic performance shall be recognized at graduation with the following designations: • Summa Cum Laude/Highest Honors for students with a 3.9 -

4.0 grade point average

• Magna Cum Laude/High Honors for students with a 3.7 - 3.89 grade point average

Cum Laude/Honors for students with a 3.4 - 3.69 grade point average

Students with an Incomplete may become eligible retroactively for graduation honors upon completion of the course requirements, and recognition shall appear on the transcript, provided the student has the required grade point average.

Grades received for developmental courses may be used to determine eligibility for semester honors. However, they cannot be used to determine eligibility for graduation honors.

\* Please note: the preliminary honors announcement at the

June graduation ceremony is based on the student's academic record effective at the end of the prior fall semester. Official honors determination is made based on the students complete record, which includes the Spring semester prior to graduation. For this reason, the official honors recognition may differ from that announced at graduation.

#### **Fresh Start**

The Fresh Start Option permits a fresh start for students who have been away from the College for two (2) or more years, who would return on probation or have been suspended. Students will be reviewed by the Academic Dean if they attended under a different Academic Standing policy.

If approved, the student will receive credit for the courses with a grade of "C-" or above (> = 1.7), including "P" (Pass). Courses with a grade less than a "C-" will not retain credit. All courses and grades remain on the student's academic record with an additional notation of when the Fresh Start Option is in effect but grades are not incorporated in the GPA.

- Fresh Start Option may be used only once.
- Fresh Start Option does not apply to any completed degree or certificates.
- Fresh Start must be applied to ALL courses taken during the time span under consideration, even if completed satisfactorily.
- A student must complete a minimum of 15 credits after returning to college under the Fresh Start Option to be eligible for a degree or certificate, and for graduation honors.

#### ACADEMIC INTEGRITY POLICY (REVISED 8 JANUARY 2003)

The effective operation of any organization is dependent on the honesty and goodwill of its members. In an organization devoted to the pursuit of knowledge, acting with integrity is essential to effective teaching and learning. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. To emphasize the importance of academic integrity, Three Rivers Community College adheres to the following policy in addition to the Student Discipline Policy, sections 2:10 and 3:1-10, as provided by the Connecticut State Colleges and Universities (ConnSCU) - Board of Regents for Higher Education. Since collaboration is central to the learning community, Three Rivers wishes to emphasize that this policy is not intended to discourage collaboration when appropriate, approved, and disclosed.

#### DEFINITIONS OF ACADEMIC DISHONESTY General Definition

(Student Discipline Policy, section 5.2.3, Expectations for Student Conduct, Connecticut State Colleges and Universities (ConnSCU) -Board of Regents for Higher Education.)

Academic Dishonesty shall in general mean conduct which has as its intent or effect the false representation of a student's academic performance, including but not limited to (a) cheating on an examination, (b) collaborating with others in work to be presented, contrary to the stated rules of the course, (c) plagiarizing, including the submission of others' ideas or papers (whether purchased, borrowed, or otherwise obtained) as one's own, (d) stealing or having unauthorized access to examination or course materials, (e) falsifying records of laboratory or other data, (f) submitting, if contrary to the rules of a course, work previously presented in another course, and (g) knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

#### ACADEMIC DISHONESTY IN A SERVICE LEARNING, PRACTICUM, INTERNSHIP, CO-OPERATIVE, OR FIELDWORK ENVIRONMENT

Conduct in community settings entered by a student as part of coursework must be equally characterized by integrity and honesty. Dishonest conduct proscribed under this policy includes but is not limited to (a) making false statements to community partners about the student's skills, credentials and accomplishments, (b) making false statements to community partners or the instructor about progress in the work the student has agreed to do in the community, including supplying false documentation of work, (c) failing to abide by the rules and policies of the community partners that the student agreed to accept as a condition of entrance into the community setting, (d) failing to return materials belonging to the community partner or instructor (e) violating the ethical principles common to professional researchers, including violation of confidentiality or anonymity agreements with research subjects, deceiving or harming research subjects, or coercing participation in research.

#### WHEN ACADEMIC MISCONDUCT IS SUSPECTED\*:

1) The faculty member will meet with the student and discuss the incident in question. If the faculty member is not comfortable with meeting the student privately, the Academic Dean or designee may be invited to attend the meeting. A faculty member may instead refer a suspected incident of academic dishonesty to the Dean's office.

2) During the course of the meeting, the faculty member should explain why he or she suspects academic dishonesty.

3) The student should be given a full opportunity to respond to the faculty member's concerns.

# 4) a) If, at the end of the meeting, the faculty member is convinced that no academic dishonesty has in fact occurred, the incident is considered resolved.

b) If, at the end of the meeting, the faculty member is not certain that an incident of academic dishonesty has occurred, the faculty member may warn the student that the assignment is questionable and that future assignments will be scrutinized carefully. The incident is then considered resolved.

c) If, at the end of the meeting, the faculty member feels strongly that an incidence of academic dishonesty has occurred, he or she may assign a grade of F or of 0 for the assignment in question, or the faculty member may require that the student complete a make-up assignment or a corrected revision in lieu of the questionable assignment. In a situation where the incident of academic dishonesty does not involve a gradable assignment, the faculty member may require the student to complete some other form of correction. (e.g. returning materials taken from a community partner).

5) a) If the student accepts the penalty assigned in Step 4, the faculty member is encouraged to report the student's name, date, assignment type, type of academic dishonesty and any disciplinary measures taken to the Academic Dean's office for confidential tracking of repeat offenders, and the incident is considered resolved.

b) If the student refuses to accept the penalty assigned in Step 4, the faculty member will report the student's name, date, assignment type, type of academic dishonesty and any recommended disciplinary measures to the Academic Dean's office for confidential tracking of repeat offenders. Furthermore, the faculty member will initiate the Discipline Procedures as defined by the Connecticut State Colleges and Universities (ConnSCU) - Board of Regents for Higher Education, in the Student Discipline Policy, section 3:1-10 by submitting a statement of possible violation with the Academic Dean.

\* Please note: Withdrawal ("W") will not be permitted if the student seeking to withdraw is suspected of having committed academic misconduct in the course from which withdrawal is sought. A withdrawal will be permitted when such suspicion is resolved by the faculty member without a conclusion the student engaged in academic misconduct in the course. The College reserves the right to substitute a final course grade for a previously recorded "W" when the final course grade reflects the judgment of a faculty member that the student committed academic misconduct in the course for which a "W" had been previously recorded.

# PROMOTING ACADEMIC INTEGRITY AT THREE RIVERS

Faculty are encouraged to distribute and discuss this document in their classes.

Faculty are encouraged to include the following statement in their syllabi:

Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; clearly document the sources of the material you use from others; and act at all times with honor.

Faculty are encouraged to have students write and sign Honor Statements for assignments where they would be appropriate. *For Example:* 

"I have not given nor received any unauthorized assistance in completing this assignment."

Or:

"I assert that the work presented in this assignment is my own original effort."

These assertions are intended to confirm the understanding between faculty and students that academic integrity is essential and not to imply a lack of integrity on the part of any student. Faculty should specify the consequences of failure or refusal to sign and may consider alternative means of affirming academic integrity.

#### **APPEAL OF GRADES**

A student who wishes to appeal an awarded grade should first confer with the faculty member concerned within 15 days of becoming aware of the grade. If the student is not satisfied with the outcome of that conference, the student should see the program coordinator and/or department chair and then, if not satisfied, may submit a written appeal to the Academic Dean, who will consult with the faculty member and the appropriate department chair. The appeals process is described in detail in the Review of Academic Standing section (sec. 3), found in the **Student Rights Policy section of the Institutional Policies page.** 

#### COURSE SUBSTITUTIONS FOR STUDENTS WITH DISABILITIES

The Americans with Disabilities Act (1992) addresses the substitution of courses required for a degree. In certain situations, provided the college has adequate documentation of the student's disability, a substitution of a course requirement for another appropriate course is possible. Students are encouraged to contact a disabilities advisor for the specific policy and procedures to follow.

# **General Academic Information**

#### GRADUATION

Three Rivers awards the Associate in Applied Science (AAS), Associate in Arts (AA) and the Associate in Science (AS) degrees and certificates to qualified candidates as authorized by the General Assembly of the State of Connecticut.

#### GRADUATION IS NOT AUTOMATIC, YOU MUST APPLY.

Three Rivers accepts applications and certifies student eligibility for graduation three times each year following the fall and spring semesters and at the end of the summer session. Application for graduation must be made according to the following schedule:

#### GRADUATION APPLICATION DEADLINES AND PROCEDURE

Spring (May) GraduationApply by November 15Summer (August) GraduationApply by March 15(Summer completers are invited to join in the May Ceremony)Fall (December) GraduationApply by June 15Students are encouraged to apply early.

Students who do not qualify for graduation in the semester for which they apply will be automatically moved forward to the next academic semester. If the application is for the Spring semester, the Registrar's Office needs to be notified if completing the degree requirements during the summer session, otherwise, the application will be moved forward to the following fall semester.

#### PROCEDURE:

1. Meet with your academic advisor for your preliminary graduation audit. The audit is the final update of your Plan of Study. Your advisor will be checking that every course and requirement has been completed and that you are registering for the outstanding requirements in your last semester.

2. Fill out the graduation application. Attach the preliminary graduation audit. Submit the completed application to the Registrar's Office. Applications are available at the Registrar's Office or online (http://www.trcc.commnet.edu/Div\_Student-Services/Registrar/PDF/Graduation\_Application.pdf).

3. The registrar's office will conduct the final graduation audit and notify you of any missing courses.

All graduates are invited to attend the annual commencement ceremony held in the spring.

#### PROGRAM REQUIREMENTS FOR GRADUATION

The Plan of Study used to determine graduation eligibility will be that under which the candidate first enrolled, except as noted in the following:

1. If the candidate was readmitted to the College, after an absence of two years or more, the Plan of Study at the time of being readmitted will be the plan of study the candidate will follow.

2. If the candidate changed his/her program one or more times during attendance, the Plan of Study used shall be that which was in effect at the time of the last change of program.

3. If the courses required within a program have been significantly changed since the time of enrolled readmission or change of program, or if other unusual circumstances exist as determined by the Registrar, the catalog in effect at the time of graduation may be used. If the candidate disagrees with the selection of catalog, he/she may seek written permission from the program coordinator and/or department chair to be evaluated under another catalog.

4. In no case will a student be permitted to use requirements from more than one catalog, or from a combination of catalogs, to meet graduation requirements.

#### **GRADUATION REQUIREMENTS:**

1. Official enrollment in a Three Rivers Community College certificate or degree program.

2. Satisfactory completion of all courses required in the certificate or degree program with a cumulative grade point average of at least 2.0 and no more than 12 credits carrying a grade of P.

3. A minimum of 25% (15 credits for career programs and 17 credits for technology programs) of the graduation credit requirements must be granted by Three Rivers.

4. Completion of a basic computer literacy requirement, if required in the specific degree program.

5. Successful completion of at least 50% of all courses attempted at Three Rivers.

6. Prompt and timely completion of the Application and an approved Plan of Study.

7. Fulfillment of all financial obligations to the College. As a courtesy, students planning to graduate in August are permitted to participate in the June commencement held before the date of their August graduation provided they apply by the

#### appropriate deadline.

Please note that the preliminary honors announcement at the June graduation ceremony is based on the student's academic record effective at the end of the prior Fall semester. Official honors determination is made based on the student's complete record, which includes the Spring semester prior to graduation. For this reason, the official honors recognition may differ from that announced at graduation.

#### CONNECTICUT STATE COLLEGES AND UNIVERSITIES (CONNSCU) - BOARD OF REGENTS FOR HIGHER EDUCATION MEDALLION FOR ACADEMIC EXCELLENCE

The Connecticut State Colleges and Universities (ConnSCU) -Board of Regents for Higher Education Medallion for Academic Excellence is awarded in recognition of outstanding academic accomplishments of associate degree graduates of the community colleges and is presented at commencement. Annually, each community college shall determine the students eligible to receive the medallion in accordance with the following criteria:

- Recipients must be graduating students who have earned a cumulative quality point ratio of 4.00;
- Recipients must have completed the degree requirements of an approved associate degree program and must have completed at least 50% of the degree requirements in residence at the community college awarding the degree;
- Graduates shall not be disqualified from receiving the award on the basis of having a "W" or other similar transcript notation of official course withdrawal(s).

This policy shall be implemented in recognition of the existence and intent of "fresh start" policies of community colleges.

#### **EARLY ALERT NOTIFICATIONS**

Through the Early Alert program, Student Services staff contact students throughout the semester as they exhibit signs of academic difficulty. Faculty members are encouraged to refer these students to Student Services on a continuing basis so they can be contacted in a timely basis to maximize student success. Notification can be made electronically by using the Progress Alerts in blackboard or by submitting the early alert form to Counseling and Advising Center. Required information to include is the specific course and section as well as the student's name and what the difficulty is.

The objective is to have the student pay attention to early warning signs and to introduce them to strategies they can use to help themselves succeed. These strategies include talking to the instructor, reducing their credit load, learning time management skills, getting tutoring, using the math and writing labs, and contacting their advisor. Students who have stopped attending will be advised to formally withdraw. This effort does not take the place of the instructor's intervention but is in

#### addition to it.

The student's assigned advisor is also notified for additional follow up. Counselors follow up on an individual basis if there is any indication of a more serious problem. Early Alert contributes to fostering student connectedness with the college as well as promoting student success.

#### **EARNING MULTIPLE DEGREES**

A student may earn two degrees in different curriculums at Three Rivers. Such a student is treated similarly to a transfer student with respect to the minimum number of credits he/ she must take for the second degree. This will require that a student complete all program requirements and in no case less than 25% of the total credits required in the new curriculum as additional hours of credit at the college through which the second degree is to be conferred.

Requests for additional degrees beyond the second require prior approval from the Academic Dean. Completion of requirements of an additional program option does not constitute a different degree. A student wishing to earn a certificate and degree in the same program must complete the requirements of the certificate prior to earning the degree.

#### **COMPUTER LITERACY REQUIREMENT**

A basic computer skill is required of all degree-seeking students who commenced their education on or after 1990. The requirement must be met by the time of graduation from the institution. However, since the value of computer literacy is to provide students additional tools to enhance their education, it is highly recommended that the computer literacy requirement be fulfilled by the end of the first semester.

Certification of literacy will be based on the accomplishment of one of the following criteria:

1. An acceptable score on CLEP or DSST (Defense Activity for Non-Traditional Education Support) exams in computer science and applications. Passage of either of these tests also results in college credit.

2. Successful completion of a computer applications challenge exam from the Three Rivers Computer Science Dept.

3. Successful completion of a computer applications or computer science course from another regionally accredited college or university.

4. Successful completion of any course, 3 credits or more, with the following prefix: CSA\*, CSC\*, or CST\*.

5. Successful completion of one of the following courses:

ACC\* K125 (Accounting Computer Applications 1) BBG\* K115 (Business Software Applications) COM\* K121 (Journalism) GRA\* K140 (Publication Design)

GRA\* K155 (Advertising from the Desktop)

#### LIB\* K201 (Digital Resources)

6. Successful completion of a degree program that has been approved by the Academic Dean and Curriculum Committee as having sufficient computer applications content throughout the degree program courses.

#### **COMPUTER RESOURCES POLICY**

The Community College System offers computing service to faculty, staff, and students for instructional and administrative use through the system data center and local campus computer centers. The availability and use of these resources carry with it a set of responsibilities for all the users of these resources. All accounts for the usage of these resources are allocated on the condition that their use is governed by the following policy. Colleges shall post the policy in all student computer laboratories and other areas that contain computer resources, (e.g., libraries) and shall include the policy in either their catalogs or student handbooks. Further, this policy statement shall be distributed to all faculty and staff involved with college computing resources and be reviewed in all pertinent classes at the first meeting of each semester.

#### CONDUCT AND ETHICS FOR USE OF COMPUTER RESOURCES

Every individual with access to computer resources and facilities at Three Rivers is bound by these policies. Any individual who breaks, or is suspected of breaking these rules, may have their authorization to use or access the computer resources immediately withdrawn. In this regard, the College reserves the right to access all accounts and/or media being used on Three Rivers' computer resources for management and security purposes.

All computer related resources and facilities at Three Rivers are under the jurisdiction of the Information Technology Division. They will be used solely for legitimate and authorized academic and/or administrative purposes required in the performance of assigned duties/academic endeavors at Three Rivers. They shall not be used for personal (private or non-profit) work not specifically authorized by the College, without the written approval of the Dean of Information Technology. Any unauthorized or illegitimate use of the computer system resources and/ or facilities may necessitate disciplinary and/or legal action against the violators. Legal action or violation of 53a-250 et seq. of the State General Statutes may lead to a felony conviction. Items covered include, but are not limited to:

- Unauthorized access to Computer Systems/ Information.
- Theft of Computer Services.
- Unauthorized disruption of Computer Services.
- Unauthorized disclosure, use, alteration, or destruction of information.
- Damage to, destruction of, or tampering with computer equipment or software.
- Unauthorized installation and/or use of non-college software on Three Rivers equipment.

Any allocation by the Information Technology Division is made with the understanding that the allocation and/or account(s) are (1) to be used solely for the purpose indicated and required by Three Rivers, (2) to be used only by the person to whom they have been allocated, and (3) to be used only while they are active members of the staff or currently registered student body.

Any individual who has been authorized to use computing resources at Three Rivers shall be expected to regard all copyrighted account(s) or proprietary information, which may become available as confidential. It may not be copied, modified, or otherwise used for other than the intended use unless prior written permission from the owner/ licensee has been obtained and a copy of this authorization provided to the Division of Information Technology. Unless otherwise legitimately noted as "Public Domain", all software used by Three Rivers shall be considered copyrighted unless cleared by the Three Rivers Information Technology Division.

Any non-State employee who uses State Computer Resources while engaged in a software development project intended for State use shall, prior to starting the project, make written arrangements with Three Rivers for payment, or sign an agreement to ensure that the product belongs to the State. All software developed by State employees using State resources is the property of the State.

No one shall attempt to disassemble, modify, repair, change configuration or relocate any computer-related equipment unless expressly authorized to do so by the Information Technology Division.

Internet access is provided at various levels. Transmission or receipt of data from the network is permitted as long as it falls within the law; complies with the restrictions imposed by our access vendor; supports College activities to enhance educational and research activities; does not contain threatening, obscene, or harassing materials; and does not contaminate or overload site resources. Applicable laws include laws of the country, states, counties and cities, etc. through which the traffic flows. Legal non-executable file formats are permitted and may be used on the system. Compressed files (.zip, .tar, .z, etc.) can be downloaded, but NOT used (not even an executed one) on College equipment and must be removed from all College systems immediately. Executable and self-extracting files can only be downloaded to College equipment if they are converted to a compressed format prior to receipt and the procedures for compressed files are followed.

#### **ConnSCU's Mission**

The Connecticut State Colleges & Universities (ConnSCU) contribute to the creation of knowledge and the economic growth of the state of Connecticut by providing affordable, innovative, and rigorous programs. Our learning environments transform students and facilitate an ever increasing number of individuals to achieve their personal and career goals.

#### Connecticut Community Colleges Mission Statement

As part of the Connecticut State Colleges & Universities (ConnSCU) system, the twelve Connecticut Community Colleges share a mission to make excellent higher education and lifelong learning affordable and accessible. Through unique and comprehensive degree and certificate programs, non-credit lifelong learning opportunities and job skills training programs, they advance student aspirations to earn career-oriented degrees and certificates and to pursue their further education. The Colleges nurture student learning and success to transform students and equip them to contribute to the economic, intellectual, civic, cultural and social well-being of their communities. In doing so, the Colleges support the state, its businesses and other enterprises and its citizens with a skilled, well-trained and educated workforce.

#### Three Rivers Community College's Mission Statement

Three Rivers is an accessible, affordable, and culturally diverse community college that meets varied educational needs by creating an environment that stimulates learning.

To accomplish its mission, Three Rivers Community College:

- offers post-secondary educational opportunities
- encourages life-long learning
- provides a well-rounded and rewarding educational experience with an emphasis on critical thinking, effective communication, and the College's institutional values.
- fosters an appreciation of the natural and social sciences, humanities, technology and the arts
- helps students achieve their goals
- serves as a community resource for people and institutions within its service area
- · delivers its services efficiently and measurably
- contributes to economic development of this region and the state.

#### **Vision Statement**

Three Rivers Community College will be a college of choice with a reputation for innovation, quality, and accessibility, serving a dynamic student population.

#### ACADEMIC SERVICES

#### THE DONALD R. WELTER LIBRARY (DONALD R. WELTER LIBRARY)

The DONALD R. WELTER LIBRARY contains books, leisure reading books, periodicals, IPads, kindles, and laptop computers, DVDs, CDs for use by both the College community and the general public. As a member of the Ex Libris Voyager network, the DONALD R. WELTER LIBRARY shares resources with Connecticut Community Colleges Libraries, providing access to over 800,000 volumes.

In addition, materials can be retrieved through the interlibrary service provided by OCLC (contains over 313 million records and 2 billion holding locations), and reQuest (a statewide Library Catalog of Connecticut). In request one can search over 5 million titles from more than 400 Connecticut libraries and place items on interlibrary loan, through academic, public, school and special libraries in the state. reQuest is a service through iCONN. Please note all interlibrary loan transactions within the state are delivered once a week to the library.

The DONALD R. WELTER LIBRARY is staffed with a Reference Librarian who provides assistance and information to all patrons. The Library offers an instructional program on properly utilizing using the library. Instruction is available for both groups and individuals upon request. The Library Instruction program is emphasized so that the Library is also a teaching unit in the college, which will provide an unlimited interdisciplinary approach to knowledge. Its purpose is to help create a richer learning environment in which students learn to do independent study with individualized instruction. In addition, the Library provides computer for general use.

The ultimate goal of the DONALD R. WELTER LIBRARY is to provide an environment where learning takes place for lifelong learners.

# TUTORING AND ACADEMIC SUCCESS CENTERS (TASC WEBSITE)

The Tutoring and Academic Success Centers (TASC) are located in Rm. C-117, next to the Donald R. Welter Library. TASC peer tutors, professional tutors, staff members, and faculty volunteers provide free individual and group academic assistance to students. TASC also offers a variety of adaptive technology services and equipment for students requiring special accommodations.

In addition, TASC has many useful handouts and numerous books, CDs, and DVDs available for Ioan. On the TASC website, students can obtain information about hours of operation, online workshops, and many useful links. TASC consists of the Tutoring Center, the Writing Center, the Mathematics Computer Lab, and the Language Arts Lab.

#### **TUTORING CENTER**

The Tutoring Center provides free one-to-one and group tutoring for most courses taught at TRCC and can also help students organize study groups. Tutoring is available on a walk-in basis or by appointment. Appointments are suggested and can be made in person or by telephone at 860-215-9082. The complete tutor schedule for both the Tutoring Center and the Writing Center is posted on the TASC website. Questions can be forwarded to: TASC@trcc.commnet.edu

#### WRITING CENTER

http://www.trcc.commnet.edu/Div\_academics/TASC/Writing-Center/WritingCenter.shtml

The Writing Center provides writing assistance for all students in all subjects. Appointments to review writing are available on a walk-in basis or by appointment. Appointments are suggested and can be made in person or by phone at 860-215-9082. Additionally, papers can be submitted via e-mail to the address below. The Writing Center web site also hosts a collection of academic writing resources, links to admission essay samples, and guides for writing resumes and cover letters. Services of the center are intended to help students learn how to improve their writing, revising, and editing skills for all collegiate courses.

Questions or paper submissions can be forwarded to: TRWritingCenter@trcc.commnet.edu

#### MATHEMATICS COMPUTER TUTORING LAB

Students can improve their math skills at the Mathematics Computer Tutoring Lab working alone or with the aid of a TASC tutor. A variety of text-specific and generalized mathematics software is available in the sixteen-station mathematics lab. Additionally, CAD and computer programming software packages are installed on several computers for tutoring purposes.

#### LANGUAGE ARTS LAB

The Reverend David L. Cannon Language Arts Lab has five computer stations and specialized software for ELL (English Language Learners). The computers also have software for those learning a foreign language, including Rosetta Stone software for learners of Spanish.

#### **ONLINE TUTORING**

Online tutoring is available to TRCC students in different forms. Ask TASC consists of three components: the Ask TASC discussion board, where students can post a question online, the Ask TASC chat room, where students can make an appointment to meet with a tutor online, and a link to the Writing Center, where students can submit drafts for review via e-mail. All currently enrolled students can access Ask TASC by logging onto myCommNet, clicking on the link to Blackboard Learn, and selecting Ask TASC from their course list.

#### Distance Learning (eLearning or Online Learning)

Distance Learning offers students a convenient way, without leaving the comforts of their home or office, to earn college credit part-time while continuing to work full-time. Distance Learning courses allows students to customize their higher education goals and to gain the collaborative and technical skills needed in today's workplace.

Learners should have some general knowledge of the Internet, e-mail and file transfer. In addition, students should be selfstarters with strong organizational and time management skills.





At present, Three Rivers offers individual courses in a variety of academic areas. It is also possible for students to take a sufficient number of distance learning courses offered by the twelve public community colleges in Connecticut to earn an A.S. degrees in General Studies, in Computer Information Systems, and in Criminal Justice. A Certificate in Health Information Management Technician may also be available. Students pursuing some degrees or certificates may be required fulfill the college's residency requirement and take a minimum of fifteen credits at the granting college.

Students are strongly encouraged to have virus protection software installed on the computer. Any infected files that are uploaded to the Blackboard servers will be blocked on upload or deleted to prevent the spread of infection.

#### **TECHNICAL SUPPORT:**

#### **TECHNICAL REQUIREMENTS**

Some of the courses require a DVD drive, as well as browser plug-ins to assist with displaying video streaming; interactive quizzes, activities and animation; and to navigate, view and print PDF files. To view these portions of the sites, one or more of the following plug-ins may be needed: RealPlayer, QuickTime, Shockwave, Adobe Flash Player and Adobe Reader. Generally, Internet Explorer will automatically download any plug-ins required by a particular page. To learn more about computer requirements visit the Browser Tune-up link at http:// www.commnet.edu/portal/tuneup/default.asp.

Because Mozilla, Google, Apple, and Microsoft are private they can change their browsers without warning, Three Rivers recommends that students have two different installed browsers (Internet Explorer and Firefox on a Widows computer OR Safari and Firefox on a Mac).

To learn more about computer requirements visit the ConnSCU Support page or the Three Rivers Educational Technology and Distance Learning page: https://websupport.ct.edu/ OR http:// www.trcc.commnet.edu/Div\_IT/EducationalTechnology/Student.shtml.

## Technical Requirement/Support for myCommNet/Blackboard Browsers

Microsoft Internet Explorer	9 - 11
Mozilla Firefox	All versions
Safari	7
Chrome 33	

#### A browser check is available at https://websupport.ct.edu/browser-check

#### **Browser Settings**

Requires Javascript Enabled	Yes
Requires Java Enabled	Yes
Requires Cookies Enabled	Yes

#### **Operating Systems** Microsoft Windows

Ma

Lin

crosoft Windows	XP, Vista, 7, 8
icOS*	OS X Tiger, Leopard,
	Snow Leopard,
	Mavericks
ux O/S	Supported

\* OS X is compatible with the Safari and Firefox browsers. Some features may be limited; more information can be found at http://www.commnet.edu/portal/tuneup/default.asp.

#### **SERVICE LEARNING**

Service learning is a course-specific educational experience in which students participate in a collaborative and organized service activity in order to meet community needs. Students gain knowledge, skills, and a new perspective related to course objectives and civic responsibilities.

A number of fields of study offer service learning in their courses, including Sociology, Women's Studies, First Year Experience, Early Childhood Education, and Psychology. Additionally, there is a dedicated Service Learning course, SOC 278, Community Research. If you have any questions, please contact the Chair of the Service Learning Committee, Janet Hagen 860-215-9433 or jhagen@trcc.commnet.edu.

#### **DEVELOPMENTAL COURSES**

The College offers developmental courses in reading, writing, and math. These courses are designed to help students whose academic skills need improvement before they take required courses in their plan of study. Developmental classes provide individual support and concentrate on the specific skills students need for academic success. Areas of emphasis are covered under each course description.

#### SERVICEMEMBERS OPPORTUNITY COLLEGE (SOC)

Many servicemembers and their families enroll annually in a variety of college courses ranging from computer science, management and accounting to math, social science, and the humanities. The College has served as a Servicemembers Opportunity College, maintaining an office and classrooms at the Naval Submarine Base in Groton. College courses, academic counseling, and registration for service members and their families are provided. College credit courses are offered in the Educational Services Center in Building 83 on the Subase. College credit is awarded for military training in conjunction with the ACE Guide.

Three Rivers also belongs to the SOCNAV and SOCCOAST Network, which affords Service members and their spouses the opportunity to complete their TRCC degree when relocating. Eligible students should contact the Subase Coordinator or Registrar for information about completing a SOC agreement. As a SOC College, Three Rivers is part of a network of two-year institutions that has agreed to accept, in transfer, what they have previously determined to be comparable course work in a given curriculum. Student agreements are made with active duty military students and their spouses at no charge and make it easier to transfer credits and complete degrees when relocating. The SOC office, located at the Subase in Building 83, is open Monday through Thursday, 10 a.m.-2 p.m. The phone number is (860) 445-5575.

#### **ACCREDITATION & MEMBERSHIPS**

#### SCHOLASTIC ACCREDITATION

Three Rivers Community College is accredited by the Connecticut Board of Regents for Higher Education and the New England Association of Schools and Colleges (NEASC), Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction.

Accreditation of an institution by the NEASC indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by NEASC is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution's accreditation by NEASC should be directed to the administrative staff of the school or college.

Individuals may also contact the Association:

New England Association of Schools and Colleges 209 Burlington Road, suite 201 Bedford, Massachusetts 01730-1433 781.271.0022

cihe@neasc.org

#### **PROFESSIONAL ACCREDITATION**

The following engineering technology programs offered at Three Rivers Community College (TRCC) campus are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. (TAC/ABET). 111 Market Place, Suite 1050, Baltimore, Maryland 21202, (410-347-7700)

- Architectural Design Technology
- Civil Engineering Technology
- Electrical Engineering Technology
- Environmental Engineering Technology
- Manufacturing Engineering Technology
- Mechanical Engineering Technology
- Nuclear Engineering Technology

The Nursing Program is accredited by the National League for Nursing Accrediting Commission, Inc., 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326

The following business programs offered at TRCC are accredited by the Association of Collegiate Business School and Programs, 11520W 119th Street, Overland Park, KS 66213

- Accounting Career
- Accounting Transfer
- Business Administration Business Information
  Systems Option
- Business Administration Transfer
- Business Administration Management
- Business Office Technology: Administrative Assistant
- Hospitality Management Casino Management Option
- Hospitality Management Hotel management Option
- Hospitality Management Restaurant Management
   Option
- Marketing

#### MEMBERSHIPS

The College is a member of the following national organizations: The College is a member of the following national organizations:

- Association of American Colleges and Universities (AAC&U)
- American Association of Community Colleges (AACC)
- American Association of University Women (AAUW)
- American Association of Women in Community Colleges
   (AAWCC)
- American Society of Engineering Educators (ASEE)
- American Technical Education Association (ATEA)
- Association of Admissions and Registrars Organizations
   (AACRO)
- Association of Collegiate Business Schools and Programs (ACBSP)
- College Consortium of International Studies (CCIS)
- Concurrent Admissions Program (ConAP)
- Connecticut Campus Compact (CCC)
- Council for Support and Advancement of Education (CASE)
- National Association of Student Financial Aid Administrators (NASFAA)
- National Association of Veterans Administration (NAVA)
- National Coalition of Campus Children's Centers (NCCCC)
- National Council of Instructional Administrators (NCIA)
- National Council on Black American Affairs (NCBAA)
- Servicemembers Opportunity Colleges Navy (SOCNAV)
- The College Board

# DIVISION OF WORKFORCE & COMMUNITY EDUCATION

Three Rivers offers a wide variety of noncredit courses and programs to accommodate the academic, business, and cultural needs of the community. Courses may be offered on campus, at offsite locations within the local community and online.

#### **Business and Industry Services Network**

The B.I.S.N. is a collaborative effort of the Connecticut Community Colleges that provides a statewide link between business, education, and training. Three Rivers can help you define and assess your needs as well as design and deliver complete training programs on a demand basis. Our experience with business and industry can help you reach your business goals. No other single source can provide you with so many different resources, conveniently and reliably.

Your business is unique; no prepackaged solution can effectively meet its needs. The B.I.S.N. department has the flexibility to customize our services to your specific requirements. Workshops and seminars, even courses for college credit, are planned to fit your schedule at your facility or ours. Program content is tailored to answer your specific questions and solve your problems whether you have 10 employees, 100 employees, or more.

- Meet with us free of charge to discuss and analyze your organization's training ideas and needs
- Invite us to design a training solution specifically for your organization
- Let us work with you to develop an innovative training approach that will accomplish the results that you want
- Learn about our top-notch team of trainers and instructors all of whom have industry experience
- Schedule training at your convenience.

Employers for whom we have provided customized training programs are: Atlantic Packaging; Birk Manufacturing; City of Norwich; General Dynamics/Electric Boat Corp.; The Gilman Brothers; High Hopes LLC; Lawrence + Memorial Hospital; MetroCast Telecommunications Inc.; New London & Norwich Adult Education; PCC Structural; Pfizer Inc.; Seconn Fabrication; TVCCA; Trumpf Inc.; W. W. Backus Hospital; and Westminister Tool, Inc.

Topics for which we are currently experiencing the greatest demand are leadership and management development, computer-related software applications, laser safety training, cultural competence, team building and communication skills.

Three Rivers specializes in unique hybrid-courses, which combine credit, as well as noncredit classes, and many can be customized for distance learning.

#### Enrollment

The Division of Workforce & Community Education has an open enrollment policy for noncredit programs. Noncredit registrations are accepted on a first-come, first-served basis. Due to limited seating, we encourage early registration.

#### Registration

Noncredit registrations will only be accepted and processed if all information is complete. You must provide the completed noncredit registration form, any prerequisite requirements (see course description), and payment in full. You will be contacted by mail or phone if the class is full.

#### **Payments**

All noncredit registrations received must be accompanied by the full amount due. Acceptable forms of payment are cash in the exact amount, check or credit card payments (Visa or MasterCard only). Credit card payments sent by fax or mail will be processed for the full amount of tuition and fees unless otherwise directed. A \$25 returned check fee will be charged for any check not honored by a banking institution. Books and supplies are additional costs that must be paid for at the time of purchase.

#### **Third Party Payments**

If you receive tuition assistance from employers, agencies, or companies, you must submit a payment authorization on official letterhead signed by a recognized official of the organization to the Workforce Education Division. Attach that letter to your noncredit registration, mail it to our office, or fax it to (860) 215-9905.

#### **Noncredit Installment Payment Plans**

Students registering for noncredit programs costing \$300 or more may enter into a payment plan agreement. This allows students to defer full payment of tuition beyond the initial registration date. An initial payment of 1/2 tuition is due with the registration form. The balance is due two weeks prior to the start of the initial program. To initiate the payment plan, please contact the Workforce & Community Education Office.

#### WIA – Workforce Investment Act Funding

Are you unemployed, recently downsized, or under-employed? Three Rivers Community College offers a number of WIA approved training programs that are funded through the Connecticut Department of Labor. Please contact your local CTWorks Office to see if you qualify or visit their website at www.ctdol.state.ct.us/wia to review the listing of qualifying programs.

#### **Veterans' Tuition Reimbursement**

Please contact the Three Rivers' Veterans Representative at 860-215-9235 for qualification requirements.

#### **REFUND POLICIES FOR NONCREDIT COURSES**

A full refund for noncredit programs will only be considered when a student drops a class up to one business day prior to the first scheduled meeting. You may submit your request to the Division of Workforce & Community Education office by mail, e-mail (WCEinfo@threerivers.edu), fax 860-215-9905 or phone 860-215-9028. Refunds are mailed directly to you approximately two to four weeks from the processing date. No refunds OR credit towards another program will be considered after the first class has begun.

#### NONCREDIT COURSE CANCELLATION AND CHANGES

The College reserves the right to limit the number of students registered in any course, to cancel any courses for which there is insufficient enrollment, and to make changes in the

schedule as circumstances require. Cancellations will be announced before the first day of class. A full refund of tuition will be granted if the College cancels a course and the student chooses not to substitute another course.

#### **CONTINUING EDUCATION UNITS**

The Continuing Education Unit, or CEU, is a nationally recognized standard of measurement for continuing education activities. The concept provides individuals with recognition for their efforts to update or broaden their knowledge or skills. A CEU is generally defined as being equal to 10 class hours (50-minute hours).

#### TRANSCRIPTS

Official transcripts for noncredit courses are available upon written request and there is no fee charge. Please send your request to The Division of Workforce & Community Education and include: the student's full name, former names if applicable, address, date of birth, signature and social security number or student ID number, date of graduation or last term of attendance and the complete name and address of the recipient of the transcript if other than "self". Please allow 5-7 working days for processing. Telephone requests will not be processed.

#### **WORKFORCE DEVELOPMENT**

#### ALLIED HEALTH

We currently offer on-site and on-line programs in allied health. On-site allied health programs are taught on campus within a classroom setting and clinical hours are spent at local medical facilities such as rehabilitation centers and community hospitals. Our current offerings include Certified Nurse Aide, Patient Care Technician, Emergency Medical Technician, Pharmacy Technician, Phlebotomy, EKG Technician, Dental Assisting and Veterinary Assistant.

#### MANUFACTURING

Connecticut is one of the top three states in the country when it comes to worker productivity, manufacturing worker productivity and manufacturing worker salaries. The Eastern Advanced Manufacturing Alliance (EAMA) is comprised of 31 manufacturing companies from eastern and southeastern Connecticut whose mission is to educate and develop tomorrow's manufacturing workforce. Three Rivers is proud to have EAMA as a partner in promoting and implementing educational training programs.

#### **PROFESSIONAL DEVELOPMENT**

Three Rivers offers a variety of professional development in the areas of leadership skills, supervisory skills, software training, real estate, small business, health and wellness, security officer training and more.

#### SPECIAL INTERESTS / PERSONAL ENRICHMENT

We offer a variety of personal enrichment and special interest courses throughout the year. Interest programs have included programs such as boating safety, culinary instruction, dance, digital photography, Zumba<sup>®</sup> fitness, and more.

#### INSTRUCTOR-FACILITATED ONLINE LEARNING ED2G0<sup>®</sup>

Ed2go®, in conjunction with TRCC, offers wide variety of online courses ranging from preparatory certifications programs to personal enrichment. Every course includes an expert instructor and all can be taken from the convenience of your home or office. Our instructor-facilitated online courses are informative, fun, convenient, and highly interactive. Our instructors are famous for their ability to create warm and supportive communities of learners. It's no wonder that many long-lasting friendships have formed in our lively and intelligent discussion areas. Courses run for six weeks (with a two-week grace period at the end). Courses are project-oriented and include lessons, guizzes, hands-on assignments, discussion areas, supplementary links, and more. You can complete any of these courses entirely from your home or office and at any time of the day or night. All courses run for six to eight weeks and are composed of 12 lessons, representing 24 or more hours of instruction. You can ask questions and give or receive advice at any time during the course.

All courses require Internet access, e-mail, and an internet browser (ex: Microsoft Internet Explorer). Some courses may have additional requirements. Visit the Online Instruction Center for more information and a complete listing of courses at www.ed2go.com/trccce.

#### **CONTACT WORKFORCE EDUCATION**

For information about the noncredit programs and services of the Division of Workforce and Community Education please visit us on campus Monday – Friday from 8:00 AM – 5:00 PM in room C-135, call our main office at 860-215-9028 or visit our website at http://www.trcc.commnet.edu/Div\_WorkforceEducation/

#### SENIORS' PROGRAMS

#### ADVENTURES IN LIFELONG LEARNING

Adventures in Lifelong Learning is under the auspices of Three Rivers Community College, Division of Workforce & Community Education. The program offers an extensive selection of learning enrichment courses. The noncredit programs encompass such topics as art, history, religion, politics and a myriad of other subjects. The curriculum also provides courses for entertainment, such as the classic movie series. Field trips to art galleries, studios, museums and historic edifices are also an integral part of each semester's lifelong learning agenda.

The noncredit programs, starting in October and April of each year, are open to those who are 50 years of age and older. Registration takes place in the Fall and Spring and the cost is \$15 per semester. The registration fee allows members to participate in all classes. Classes are held at the college campus.

#### **DEFINITIONS OF IMPORTANT TERMS**

Throughout this catalog you will hear a number of terms that are unique to higher education. This glossary lists many of those terms in alphabetical order. If you need more help, please don't hesitate to ask your advisor.

#### AA - ASSOCIATE IN ARTS

An undergraduate degree awarded upon successful completion of a specified program of study in Liberal Arts and Sciences including the completion of a least 60 credits.

#### **AAS - ASSOCIATE IN APPLIED SCIENCE**

An undergraduate degree awarded upon successful completion of a program of study in an applied technology.

#### **AS - ASSOCIATE IN SCIENCE**

An undergraduate degree awarded upon successful completion of a specified program of study either in a subject area or in General Studies including the completion of at least 60 credits.

#### ACADEMIC ADVISING

An opportunity for students to meet with their advisors to obtain and review their plan of study and to select courses.

#### ACADEMIC ADVISOR

College staff member responsible for providing guidance in course or program related issues.

#### ACADEMIC TERM (SEMESTER)

Fall and spring periods with 14 weeks of instruction and one week of finals.

#### ADD A COURSE

To enroll for additional courses after registration is complete, accomplished through the Registrar's Office.

#### ADD/DROP PERIOD

A period of approximately two weeks (Fall and Spring semester) after the first day of classes when students can add or drop a class through the Registrar's Office.

#### **ADMINISTRATIVE NOTATIONS**

Grades assigned to a student's transcript.

#### **ADVANCED ELECTIVE**

Course requirement(s) in a program of study which generally may be fulfilled by a course numbered 200/2000 or above. These correspond to sophomore level courses in traditional bachelor's degree programs. The courses that satisfy this requirement may vary from program to program; please consult with advisor.

#### ADVANCED LIBERAL ARTS AND SCIENCES ELECTIVE

The courses that satisfy this elective may vary; students should consult with their advisors. Advanced Liberal arts courses, numbered 200/2000 or above, generally include courses in the humanities, social sciences, natural sciences and math.

#### ALUMNI

Graduates, in the plural.

#### **ARTICULATION AGREEMENT**

A formal agreement between Three Rivers Community College and a four-year college or university which outlines specific course, grade point, and credit requirements necessary to transfer from Three Rivers to that four-year institution. Some articulation agreements are also established with high schools to provide advanced placement opportunities, advanced college credit and College Career Pathways or 2 +2 articulated college credit.

#### **APL/ASSESSMENT OF PRIOR LEARNING**

A process through which students may earn credit for collegelevel learning acquired through non-collegiate experiences such as employment, military training, community service, and volunteer activities.

#### **ARTS ELECTIVE**

The courses that satisfy this elective may vary; students should consult with their advisors. Courses in the arts generally include courses in art, creative writing, graphics arts, music, world music cultures and Architecture of the World.

#### AUDIT

To take a course under a written arrangement with the faculty member and student in which the final grade is AU. Generally involves regular attendance and participation, but limits graded activities, such as exams; requires full payment of tuition and fees; paperwork must be returned to the Registrar's office no later than the fourth week of the first day of classes.

#### **CAREER PROGRAM**

A specialized degree designed to equip a student with the skills and general educational background needed for employment in a specific field, (i.e., Accounting, Business Administration, and Nursing)

#### **CERTIFICATE PROGRAM**

An academic program of study in a specific field intended for occupational training, upgrading or retraining, generally requiring 30 credits or less. A certificate is awarded upon successful completion of the program.

#### COMMENCEMENT

The formal ceremony conferring degrees and certificates upon qualified graduating students.

#### COMMON COURSE NUMBERING

Courses that are numbered the same at all Connecticut Community Colleges. Courses which have been converted to a common number are notated with an \* after the descriptor, (i.e., NUC\*).

#### **CO-REQUISITE**

A course which must be taken at the same time as another course. For example, General Electricity Lab is a co-requisite for General Electricity.

#### **COURSE REFERENCE NUMBER (CRN)**

A number assigned to a specific course section in the schedule of classes.

#### **CREDIT COURSE**

An academic course, numbered above 100/1000 in the college catalog, which may be applied toward completion of a degree or certificate. (See Developmental Course)

#### **CREDIT HOUR**

A standard measure of the amount of instructional time required to successfully complete a course. (For example, ENG\* K101, College Composition, is a 3 Credit Hour course, which usually means it will meet for 3 hours each week.) For the length of each class session and lab hours, if any, be sure to check with your advisor or a faculty member regarding specific courses.

#### CURRICULUM

Set of courses focused in a particular field (i.e., Accounting, Criminal Justice, Liberal Arts and Sciences, Nuclear Engineering Technology, Nursing).

#### DEGREE PROGRAM

An Associate in Arts (AA) or Associate in Science (AS) or Associate in Applied Science (AAS) plan of study requiring a minimum of 60 credits for completion.

#### **DEVELOPMENTAL COURSE**

A basic skill development course numbered below 100/1000 in the College catalog which is credited in meeting financial aid eligibility and veterans benefits but does not count toward the minimum requirements for graduation. (See Credit Course)

#### **DISTANCE LEARNING**

Courses offered via the Internet.

#### **DROP FROM A COURSE**

To cease to participate in a course after registration is complete, accomplished through the Registrar's Office.

#### ELECTIVE

Course requirement(s) in a program of study which may be fulfilled by choosing from a variety of specified courses.

#### **ELECTIVE, ADVANCED**

Course requirement(s) in a program of study which generally may be fulfilled by a course numbered 200/2000 or above. The courses that satisfy this requirement may vary from program to program; please consult with advisor.

#### **ELECTIVE, LIBERAL ARTS & SCIENCES**

Course in a plan of study which a student may choose from the humanities, social sciences, math or natural sciences fields. The courses that satisfy this requirement may vary from program to program; please consult with advisor.

#### ELECTIVE, OPEN (OR UNRESTRICTED)

Course requirement(s) in a program of study that may be fulfilled with any course (numbered above 100/1000) of the student's choosing.

#### ELECTIVE, TECHNICAL

A college credit course chosen by the student to fulfill the academic credit requirements for a degree from the student's major technology or any technology with the approval of the academic advisor.

#### **ENGINEERING TECHNOLOGY**

Lies closest to the engineer in the occupational spectrum between the crafts person and the engineer. Requires the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities. "Engineering technician" refers to a graduate of an associate degree program. Graduates of baccalaureate programs are called "engineering technologists."

#### FIELD WORK EXPERIENCE

Work experience given for credit, under supervision of an agency or employer and College staff or faculty member.

#### **FINANCIAL AID**

Funding provided to students from various sources to assist in defraying expenses of college (See Financial Aid section of this catalog).

#### FINANCIAL AID FORM (FAFSA)

A standardized application including detailed financial data, which is required to determine eligibility for all financial aid programs.

#### FOREIGN LANGUAGE ELECTIVES

Two semesters of the same foreign language are required. (Liberal Arts and Sciences electives may be substituted if two years of the same foreign language with a grade of "C" or higher were completed at the high school level. High school transcript and college verification are required for substitution.)

#### FULL-TIME (STUDENT)

Student registered for 12 or more credits in a semester at Three Rivers.

#### **GPA (CUMULATIVE GPA)**

Grade Point Average. Used to compute academic standing (see Academic Information Section of this catalog).

#### GRADUATION

Certification of the completion of all degree/certificate requirements by the posting of the appropriate degree to the student's academic record.

#### HYBRID

Courses offered via the Internet and on-ground.

#### HUMANITIES

Humanities courses which satisfy elective requirements may vary from program to program; please consult with advisor.



#### LAB HOURS

Lab hours are learning activities, which are "hands- on" rather than the traditional lecture/discussion. Lab hours provide experiments/exercises that focus on the lecture applications. Since lab hours are the co-requisite to the lecture/discussion portion of a class, students need to register for both (lecture and lab) course reference numbers (CRN's) in the same semester.

#### LIBERAL ARTS AND SCIENCES ELECTIVES

The courses that satisfy this elective may vary; students should consult with their advisors. Liberal arts courses generally include courses in the humanities, social sciences, natural sciences and math.

#### MATRICULATION

Enrollment in credit courses applicable to the requirements of a degree or certificate program.

#### NATURAL SCIENCE ELECTIVES

The courses that satisfy this elective may vary; students should consult with their advisors. Courses in the natural sciences generally include laboratory and non-laboratory courses in biology, chemistry, earth science, environmental, physics, nutrition and oceanography.

#### NON-CREDIT

Non-academic course oriented to personal interest or continuing education needs of persons seeking non-credit bearing instruction.

#### PART-TIME (STUDENT)

Student enrolled for 11 or fewer credits in a semester.

#### ΡΗΙ ΤΗΕΤΑ ΚΑΡΡΑ

A national honorary organization recognizing academic scholarship by community/technical college students.

#### **PLAN OF STUDY**

A worksheet of courses required to earn a degree in a chosen area of study. Used as a roadmap for course selection. Used to conduct a final audit for graduation. Must be signed by the assigned academic advisor in order to register for the student's second semester.

#### PRACTICUM

See Field Work Experience.

#### PREREQUISITE

Skill or course required for entry into a course or program of study.

#### **PROGRAM OF STUDY**

(See Degree Program and Certificate Program)

#### **RESIDENCE (CREDITS EARNED IN)**

A minimum of 15 credit hours applicable to an associate degree (25% of a Technical Program or 17 credits) must be granted by Three Rivers as opposed to credits transferred in from another institution of higher education or earned through proficiency examination.

#### **SEMESTER (TERM)**

See Academic Term.

#### SOCIAL SCIENCES ELECTIVES

The courses that satisfy this elective may vary; students should consult with their advisors. Courses in the social sciences generally include courses in anthropolgy, economics, history, geography, psychology, political science, sociology, international studies and selected courses from other disciplines.

#### TAC OF ABET

Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

#### TRANSCRIPT

Permanent record of student academic grades.

#### **TRANSFER GUIDELINES**

Informal documents which suggest courses to be taken at Three Rivers that transfer into a four-year college.

#### **TRANSFER PROGRAM**

A degree program designed for students who plan to continue their academic careers beyond the associate degree level through transfer to a four-year college or university.

#### TUITION

Charges to student by the college for registration in credit courses of instruction.

#### WITHDRAW FROM A COURSE

To cease to participate in a course after the add/drop period, accomplished through the Registrar's Office.

#### WITHDRAW FROM THE COLLEGE

To cease to participate in all courses for one semester or more, accomplished through the Registrar's Office.

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Three Rivers Community College offers a comprehensive array of programs of study as described in the following pages. The specific curricular patterns in the associate degree programs lead either to the degree of associate in arts (AA), the degree of Associate in Science (AS), or the degree of Associate in Applied Science (AAS). Career and transfer programs are available for many associate degree programs. TRCC also offers many certificate programs. Certificates are credentials that are recognized by employers and prepare students for entry level positions and/or career advancement. In many cases, the coursework within a certificate program is applicable to an associate program for a particular field of study, and serves as a stepping stone to subsequent completion of an associate degree.

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Introduction to Manufacturing Certificate	e 122	LIBRARY TECHNOLOGY
Manufacturing Engineering Technology AS	120	Library Technology Certificate
Laser Manufacturing Option AS	121	HEALTH AND WELLNESS
Mechanical Engineering Technology AS	127-128	Nursing AS
Nuclear Engineering Technology AS	129	Exercise Science AS
Technology Studies AS	136	Health Pathways Certificate
Technology Studies: Biomolecular Science		Sports and Leisure Management AS
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Option AS	137-138	Criminal Justice - Treatment AS
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Technology Studies: Electrical Option AS	139-140	Security and Loss Prevention Certificate
Technology Studies: Engineering Technology		Early Childhood Education AS
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Technology Studies: Lean Manufacturing and	Supply	Human Services AS
Chain Management Option AS	141-142	Case Management Certificate
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#### Accounting Career

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356 **Associate In Science** Program Coordinator: Edwin Muenzner - 860-215-9456

This program is designed for people who intend to seek employment following graduation as junior accountants or accounting clerks. The accounting field is among the fastest growing occupations in Southeastern Connecticut. This career program prepares students for accounting positions in business and industry, government, and public accounting firms upon completion of the 63-64 credit curriculum.

Course ID SEMESTER I	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
MAT* K123°	Elementary Statistics	3
	TOTAL	16
SEMESTER II		
ACC* K112°	Principles of Accounting II	4
ACC* K125°	Accounting Computer Applications I	3
COM* K173°	Public Speaking	3
ECN* K101°	Principles of Macroeconomics	3
	Fine Arts Elective	3
	TOTAL	16
SEMESTER III		
ACC* K233°	Principles of Cost Accounting	4
BBG* K231°	Business Law I	3
BFN* K110°	Personal Finance	
or	or	3
BFN* K201°	Principles of Finance	
BMG* K202°	Principles of Management	3
BMK* K201°	Principles of Marketing	3
	TOTAL	16
SEMESTER IV		
ACC* K241°	Federal Taxes I	3
ACC* K271°	Intermediate Accounting I	3
ACC* K292°	Accounting Practicum	
or	or	3
	Elective from one of the following pr	
	*, BMK*, HSP*. (ACC* K272 strongly r	ecommended)
BBG* K232°	Business Law II	3
	Natural Sciences Elective	3-4
	TOTAL	5-16
	GRAND TOTAL	63-64
	prerequisite. Students should c	heck course
description.		

#### Accounting Career, Associate in Science Degree **Program Outcomes**

Upon sucessful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary

specific to the field of Accounting.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Accounting.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

4. have obtained a well-rounded general education.

5. sucessfully find a job in the Accounting field.

#### Accounting Transfer

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356 Associate in Science

Program Coordinator: Edwin Muenzner- 860-215-9456

Accounting is concerned with the preparation and maintenance of adequate, informative, and accurate systems of financial records for all kinds of public and private organizations and is among the fastest growing occupations in South eastern Connecticut. This program is designed primarily for students who plan to transfer to a four-year college. Students are urged to investigate and select the institution which they will transfer as early as possible since each transfer situation must be planned to meet specific baccalaureate requirements. A minimum of 64 credits is required for graduation.

Course ID SEMESTER I	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	-
ENG* K101°	Composition	3 3 3
IDS K105	First Year Experience	3
	TOTAL	13
SEMESTER II		
ACC* K112°	Principles of Accounting II	4
ECN* K101°	Principles of Macroeconomics	3
ENG* K102°	Literature and Composition	3
	Fine Arts Elective	3 3
	Natural Sciences Elective with lab	4
	TOTAL	17
SEMESTER III		
ACC* K271°	Intermediate Accounting I	3
BBG* K231°	Business Law I	3
BMG* K202°	Principles of Management	3 3 3 3
ECN* K102°	Principles of Microeconomics	3
MAT* K172°	College Algebra	3
	TOTAL	15
SEMESTER IV		
ACC* K272°	Intermediate Accounting II	3
BMK* K201°	Priciples of Marketing	3
BFN* K201°	Principles of Finance	3 3 3 3 3
ENG* K202°	Technical Writing	3
MAT* K167°	Principles of Statistics	
	TOTAL	15
	GRAND TOTAL	60

#### Accounting Transfer, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary specific to the field of Accounting.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Accounting.

3. demonstrate the ability learned principles and skills to unique factual settings using correct vocabulary.

4. have obtained a well-rounded general education.

sucessfully transfer to a 4-year college/university.

#### Accounting Core Certificate Program

#### **Certificate Program**

Program Coordinator: Edwin Muenzner- 860-215-9456

This 15 credit hour certificate program is designed for students wishing specific training in accounting and other business subjects for upgrading their present positions or entry into business or industry. Students may complete this certificate by completing the courses that are listed below. Students may complete this certificate by completing the courses that are listed below.

English Competency Requirement met by:

#### ACCOUNTING CORE CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
ACC* K112°	Principles of Accounting II	4
ACC* K125°	Accounting Computer Applications I	3
ACC* K233°	Principles of Cost Accounting	4
	GRAND TOTAL	15

°Course has a prerequisite. Students should check course description.

The English Competency Requirement is met by placement in ENG\* K101, transfer credit, or completion of ENG\* K096.

#### Accounting Core, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Accounting.

2. demonstrate knowledge of those principles and skill applicable to general business and those specific to the field of Accounting

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

#### IN MANY CASES, THE COURSEWORK

WITHIN A CERTIFICATE PROGRAM

IS APPLICABLE TO AN ASSOCIATE

**DEGREE PROGRAM FOR A** 

#### PARTICULAR FIELD OF STUDY

#### **Accounting Certificate Program**

#### **Certificate Program**

Program Coordinator: Edwin Muenzner- 860-215-9456

Students wishing specific training in accounting and other business subjects for upgrading in their present positions or entry into business or industry may complete the 30 credit hour certificate program by completing the courses that are listed below.

Students may complete this certificate by completing the courses that are listed below.

# English Competency Requirement met by:

#### ACCOUNTING CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
ACC* K112°	Principles of Accounting II	4
ACC* K125°	Accounting Computer Applications I	3
ACC* K233°	Principles of Cost Accounting	4
ACC* K241°	Federal Taxes I	
or	or	3
BFN* K201°	Principles of Finance	
ACC* K271°	Intermediate Accounting	3
BBG* K115°	Business Software Applications	3
BBG* K231°	Business Law I	3
BFN* K110°	Personal Finance	
or	or	3
ECN* K101°	Principles of Macroeconomics	
GRAND TOTAL	30	

° Course has a prerequisite. Students should check course description.

# The English Competency Requirement is met by placement score in ENG\* K101, or transfer credit or completion of ENG\* K096.

#### Accounting, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate the use of generally accepted accounting principles, concepts and techniques in the recording and reporting of financial statements.

2. analyze accounting information for decision making, including the areas of job cost, process cost, absorption and variable costing approaches, and relevant costs.

3. use accounting software and spreadsheets.

4. obtain successful employment in the Accounting field or upgrade skills for current employment.

#### Architectural Design Technology

#### Accredited by the Technology Accreditation Commission of ABET http://www.abet.org **Associate In Science**

Program Coordinator: Mark Comeau - 860-215-9415

The Architectural Design Technology Associate Degree Program is designed to expand opportunities for those interested in the drafting/design fields. The program serves those seeking entry-level positions and those who plan on continuing studies at a university. The program exposes students to the fundamentals of traditional drafting and design and incorporates leading edge technology of computer-aided drafting (AutoCAD). Graduates of the program will be qualified to fill many diverse positions in the industry or transfer to a baccalaureate or professional degree program. Positions may include: design and production under the supervision of a registered architect, draftsperson for construction or development firms, architectural representative for vendor sales, and designer/draftsperson for facility planners.

#### ARCHITECTURAL DESIGN TECHNOLOGY CURRICULUM (suggested 2 year sequence)

Course ID	Title of Course	Credits
SEMESTER I		
ARC* K102	Architecture of the World	3
ARC* K135	Construction Graphics	1
ARC* K135L	Construction Graphics Lab	2
CAD* K106	Computer-Aided Drafting	1
CAD* K107	Computer-Aided Drafting Lab	2
ENG* K101°	Composition	3
PHY* K114°	Mechanics	4
	TOTAL	16
SEMESTER II		
ARC* K108°	Building Materials	3
ARC* K137°	Architectural Detailing	1
ARC* K137L°	Architectural Detailing Lab	2
CAD* K214°	Computer-Aided Drafting - Construction	1
CAD* K215°	Computer-Aided Drafting - Construction Lab	2
COM* K173°	Public Speaking	3
MAT* K186°	Precalculus	4
MEC* K114°	Statics	3
	TOTAL	19
SEMESTER III		
ACC* K111°	Principles of Cost Accounting I	
or	or	
BBG* K101	Introduction to Business	3-4
or	or	
BMG* K202°	Principles of Management	
ARC* K211°	Architectural Design I	1
ARC* K211L°	Architectural Design I Lab	2
ARC* K221	Contracts & Specifications	3 3
ARC* K282°	Trends & Issues	
	Elective: Humanities and Arts	3
	TOTAL	15-16
SEMESTER IV		
ARC* K213°	Architectural Design II	1
ARC* K213L°	Architectural Design II - lab	2

ARC* K227	Codes and Ordinances	3
ARC* K241°	Site Analysis	2
ARC* K241L°	Site Analysis Lab	1.5
	Open Elective	3
	Social Science Elective	3
	TOTAL	15.5
	GRAND TOTAL	65.5-66.5

° Course has a prerequisite. Students should check course description.

#### Architectural Design Technology, Associate in Science **Degree Program Objectives**

Graduates of the Architectural Design Technology program will:

1. be gualified to make technical and creative contributions to and find employment in drafting, development, and design in the practice of architectural design technology.

2. have an appreciation for the need to be lifelong learners. demonstrate professionalism and a sense of societal and ethical responsibility in their professional endeavors.

3. engage in professional development or study in a four-year degree program to pursue flexible career paths amid future technological changes.

#### Architectural Design Technology, Associate in Science **Degree Program Outcomes**

Graduates of the Architectural Design Technology Program will:

1. practice the skills needed to work effectively in teams and as an individual.

2. demonstrate the ability to use appropriate mathematical computational, and graphic-thinking skills needed for architectural design technology applications.

3. combine oral, graphical and written communication skills to present and exchange information effectively and communicate design solutions.

4. know of a professional code of ethics.

5. describe how the concepts of design program, spatial analysis, historical precedence, and material methods and assemblies affect the design process.

6. illustrate an ability to think critically and identify, evaluate and solve complex design problems; demonstrate creativity and functionality in design problem solutions; and communicate solutions graphically and effectively.

7. illustrate an ability to think critically and identify, evaluate and solve complex design problems; demonstrate creativity creativity and functionality in design problem solutions; and communicate solutions graphically and effectively. 8. recognize actions and acts of professionalism that allow them to become informed and participating citizens cognizant of ethics, civic duty and social responsibility. recognize the need to become lifelong learners.

#### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE **DEGREE PROGRAM FOR A** PARTICULAR FIELD OF STUDY

#### Architectural Drafting Technology Certificate Program

#### **Certificate Program**

Program Coordinator: Mark Comeau - 860-215-9415

The architectural Design Technology Certificate Program is designed to expand opportunities for those interested in the drafting/design fields. The program serves those seeking entry-level positions and those who plan on continuing studies at a university. The program exposes students to the fundamentals of traditional drafting and design and incorporates leading edge technology of computer-aided drafting (AutoCAD). Graduates of the program will be qualified to fill many diverse positions in the industry or transfer to a baccalaureate or professional degree program. Positions may include: design and production person under the supervision of a registered architect, draftsperson for construction or development firms, architectural representative for vendor sales and draftsperson for facility planners.

Students may complete this certificate by completing the courses that are listed below.

#### ARCHITECTURAL DESIGN TECHNOLOGY

#### **CERTIFICATE CURRICULUM**

(suggested 2 semester sequence)

Course ID	Title of Course	Credits
SEMESTER I		
ARC* K108	Building Materials	3
ARC* K135	Construction Graphics	1
ARC* K135L	Construction Graphics Lab	2
CAD* K106	Computer-Aided Drafting	1
CAD* K107	Computer-Aided Drafting Lab	2
ENG* K101°	Composition	3
	Directed Elective - see program coordinator	3
	TOTAL	15
SEMESTER II		
ART* K111°	Drawing I	3
ARC* K137°	Architectural Detailing	1
ARC* K137L°	Architectural Detailing Lab	2
CAD* K214°	Computer-Aided Drafting - Construction	1
CAD* K215°	Computer-Aided Drafting Lab - Construction	2
	TOTAL	9
	GRAND TOTAL	24
° Course has a pu	roroquisito. Students should sheck sou	***

° Course has a prerequisite. Students should check course description.

#### Architectural Drafting Technology, Certificate Program Outcomes

Graduates of the Architectural Design Technology program will:

1.demonstrate a mastery of the basic skill sets required for entry level in architectural drafting and design.

2. integrate a core curriculum with architectural design theory, technical background and practice elements in order to seek advanced professional degrees.

 Pursue expanded opportunities in the drafting and graphics fields for those with previous experience in allied areas.
 demonstrate competence in the specific traditional and



computer drafting skills required in today's architectural in dustry, consisting of conceptual, schematic, developmental and construction detail drawing.

5. demonstrate and apply skills necessary for visual thinking and graphic problem solving.

6. use and produce appropriate materials with industry standard software applications.

7. provide sufficient explanation of drafting and drawing components.

8. adopt a life-long learning and intellectual growth as an integral part of a career in architectural drafting technology due to ever-evolving components and systems.



#### **Aviation Maintenance Technology**

**Associate in Science** 

Contact: Patrick Knowles- 860-215-9445

Aviation Maintenance Technology is an Associate in Science Degree Program. Requirements include successful completion of a Federal Aviation Administration approved Airframe and Powerplant Mechanics Program. The student must also obtain an active license for which 22 semester hours of college credit will be granted. In addition, 48 semester hours of college instruction will be required as prescribed in the curriculum below. Graduates of this program have obtained employment as mechanics at airports or technicians with aircraft and power plant companies. Students may also continue their education towards a baccalaureate degree in the industrial or manufacturing field.

#### AVIATION MAINTENANCE TECHNOLOGY CURRICULUM

Course ID	Title of Course	Credits
	Connecticut Aero Tech School.†	22
	TOTAL	22
SEMESTER I		
ENG* K101°	Composition	3
MAT* K186°	Precalculus	4
MEC* K152°	Fundamentals of Engineering Graphics	1
MEC* K153°	Fundamentals of Engineering Graphics Lab	2
PHY* K114°	Mechanics	4
	TOTAL	14
SEMESTER II		
CHE* K111°	Concepts of Chemistry	4
COM* K173°	Public Speaking	3
ENG* K202°	Technical Writing	3
MAT* K254°	Calculus I	4
PHY* K115°	Heat Sound Light	4
	TOTAL	18
SEMESTER III		
EET* K105°	Electric Circuits and Systems	3
EET* K106°	Electric Circuits and Systems Lab	1
MEC* K262°	, Materials Science	3
MEC* K263°	Materials of Science Lab	1
	Humanities/Social Science elective	3
	Humanities/Social Science elective	3
	TOTAL	14
	GRAND TOTAL	68

° Course has a prerequisite. Students should check course description.

† To obtain an FAA license you must complete 6 semesters (Fall, Spring) at Connecticut Aero Tech School.

#### Aviation Maintenance Technology, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

- 1. explain the principles of airframe maintenance
- explain the principles of aircraft powerplant maintenance.
   utilize the library and World Wide Web to obtain

information.

4. apply the principles of college physics and material science. explain basic electric circuits.

5. demonstrate basic computer skills.

6. take the FAA examinations and seek employment in the aviation maintenance field.

# Business

#### **Business Administration Management**

#### Associate in Science

Program Coordinator: Larry Flick - 860-215-9426

This Management career program prepares individuals for management positions in small businesses, corporations, gov ernment, and public and private agencies upon completion of a 62-63 credit curriculum. Recent surveys show that there are increasing opportunities for managerial employment in areas such as finance, retailing, and many other business services. Individuals already employed in business or industry seeking career advancement would also benefit from this program as a source of professional development.

#### **BUSINESS ADMINISTRATION MANAGEMENT CURRICULUM**

Course ID SEMESTER I	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3
ENG* K101°	Composition	3
IDS K105	•	3
MAT* K123°	First Year Experience	3
MAI KIZJ	Elementary Statistics TOTAL	3 16
SEMESTER II	TOTAL	10
ACC* K118°	Managerial Accounting	4
BMG* K202°	Principles of Management	3
COM* K173°	Public Speaking	3
ECN* K101°	Principles of Macroeconomics	3
ECN KIUI	Fine Arts Elective	з 3
	TOTAL	3 16
SEMESTER III	IUIAL	10
BBG* K210°	Business Communication	3
BBG* K231°	Business Law I	
		3 3
BMG* K220°	Human Resources Management	3 3
BMK* K201°	Principles of Marketing	•
	Elective from the following prefixes: AC	
	BES*, BFN*, BMG*, BMK*, HSP*	3
CENTEER IN	TOTAL	15
SEMESTER IV	<b>N</b>	•
BBG* K232°	Business Law II	3
BBG* K294°	Business Internship	
or	or	3
	Elective from the following prefixes: AC	C*, BBG*,
BES*, BFN*, BMG		
BMG* K210°	Organizational Behavior	3
BMG* K218°	Operations Management	
or	or	3
BMG* K228°	Labor and Employment Law	
	Natural Science Elective	3-4
	TOTAL	15-16
°C	GRAND TOTAL	62-63

°Course has a prerequsite. Students should check course description

### Business Administration Management, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary

and vocabulary specific to the field of Business Administration. 2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Business Administration.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

4. have obtained a well rounded general education.

5. be prepared for employment in Business Administration.

#### **Business Administration Transfer**

#### **Associate in Science**

Program Coordinator: Larry Flick - 860-215-9426

This program is designed primarily for those students who plan to transfer in business administration to a baccalaureate institution. Students are urged to investigate and select the institutions to which they will transfer as early as possible since each transfer situation must be planned carefully.

#### **BUSINESS ADMINISTRATION TRANSFER CURRICULUM**

Course ID SEMESTER I	Title of Course	Credits
SEMESTER T BBG* K115°	Dusiness Coffmans Applications	2
ENG* K101°	Business Software Applications Composition	3 3
IDS K105		3
MAT* K172°	First Year Experience	3 3
MAI KIZ	College Algebra Fine Arts Elective	3
		-
сгигстер н	TOTAL	15
SEMESTER II	Duin internet Accounting 1	4
ACC* K111°	Principles of Accounting I	4
BBG* K231°	Business Law I	3
ECN* K101°	Principles of Macroeconomics	3
ENG* K102°	Literature and Composition	3
MAT* K167°	Principles of Statistics	3
	TOTAL	16
SEMESTER III		
ACC* K118°	Managerial Accounting	4
BMG* K202°	Principles of Management	3
BBG* K232°	Business Law II	3
BMK* K201°	Principles of Marketing	3
ECN* K102°	Principles of Microeconomics	3
	Science Elective (choose one of the following:	AST*
K101, BIO* K260 c	or CHE* K101)	3
	TOTAL	19
SEMESTER IV		
BBG* K210°	Business Communication	3
BFN* K201°	Principles of Finance	3
BMG* K210°	Organizational Behavior	3
	History Elective (Choose one of the following	: HIS*
K121, 122, 201, oi	r 202)	3
	Natural Sciences Elective with lab	4
	TOTAL	16
	GRAND TOTAL	66
° Course has a p	rerequisite. Students should check cou	rse

° Course has a prerequisite. Students should check course description.

#### Business Administration Transfer, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements,

Business

graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Business Administration. 2. demonstrate knowledge of those principles and skills appli cable to general business and those specific to the field of **Business Administration.** 

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary. 4. have obtained a well rounded general education.

5. successfully transfer to a 4 year college/university Business Administration program.

#### **Basic Business Skills Certificate Program**

#### **Certificate Program**

Program Coordinator: Edward Muenzner- 860-215-9456

This 24-25 credit certificate program is designed to give students not majoring in business sufficient basic business skills to be able to function adequately at a rudimentary level in a workplace environment immediately upon completion. This certificate is comprised of courses designed to provide students with a basic understanding of commerce in society, basic business structures and functions, communication skills (both oral and written), math and computer skills. This certificate is tailored to meet individual student needs and interests by incorporating a business elective course. Students are encouraged to develop their individual areas of interest or maximize employment opportunities by choosing a specific elective option.

Students deciding to continue on for an Associate in Science Degree in Accounting will find that all but one of the courses taken in this certificate course are acceptable for the degree program at TRCC.

Students may complete this certificate by completing the courses that are listed below.

#### BASIC BUSINESS SKILLS CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BBG* K101	Introduction to Business	3
BBG* K115°	Business Software Applications (recommended	d)
or	or	3
CSA* K105	Introduction to Computers	
BFN* K110°	Personal Finance	3
COM* K173°	Public Speaking	
or	or	3
ENG* K202°	Technical Writing	
ECN* K101°	Principles of Macroeconomics or higher	3
ENG* K101°	Composition or higher	3
MAT* K135°	Topics in Contemporary Math or higher	3
	Business Elective	3-4
	GRAND TOTAL	24-25

° Course has a prerequisite. Students should check course description.

#### **Basic Business Skills, Certificate Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of the role of commerce in U.S. society and the world community.

2. demonstrate knowledge of how businesses are structured

#### and function.

3. exhibit fluency in oral and written communication skills. 4. exhibit competency in basic math skills.

5. exhibit competency in computer skills specific to a business environment.

#### **Business Administration Certificate** Program

#### **Certificate Program**

Program Coordinator: Larry Flick - 860-215-9426

This 29 credit hour certificate program is designed for students who seek concentrated study in the field of management. Practical application to job situations will be stressed.

Students may complete this certificate by completing the courses that are listed below.

#### **BUSINESS ADMINISTRATION CERTIFICATE CURRICULUM**

Course ID	Title of Course	Credits	
ACC* K111°	Principles of Accounting I	4	
ACC* K118°	Managerial Accounting	4	
BBG* K115°	Business Software Applications	3	
BMG* K202°	Principles of Management	3	
BMK* K201°	Principles of Marketing	3	
ECN* K101°	Principles of Macroeconomics	3 3 3 3	
ENG* K101°	Composition	3	
Select Two (2) Courses from the Following Five Courses			
BBG* K101	Introduction to Business		
BES* K218°	Entrepreneurship		
BMG* K218°	Operations Management		
BMG* K220°	Human Resources Management		
ECN* K102°	Principles of Microeconomics		
	GRAND TOTAL	29	
° Course has a prerequisite. Students should check course			

° Course has a prerequisite. Students should check course description.

#### **Business Administration, Certificate Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

explain the role of management and its interrelationship with 1. with other functional areas in order to achieve organizational goals.

2. identify the elements of management and their application to organizational activities and goals.

3. discuss the role of ethical issues and the importance of the global perspective, and their impact on the success of a business.

4. explain the importance of information technology in business.

5. demonstrate skills in problem solving, in decision-making, and in teamwork, including the ability to work with diverse groups.

6. obtain successful employment in the business field or upgrade current job skills.

#### Business Management Core Certificate Program

#### **Certificate Program**

Program Coordinator: Betti Gladue - 860-215-9430

This 14 credit hour certificate program is designed for students who seek to acquire the basic working skills to enter a business, wish to expand their opportunities and choices, and/ or transfer to Eastern or another 4-year university.

Students may complete this certificate by completing the courses that are listed below.

English Competency Requirement met by:\_

# BUSINESS INFORMATION SYSTEMS CORE CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BBG* K115°	Business Software Applications	3
CSC* K108°	Intro to Programming	4
CSA* K205°	Advanced Applications	3
CSC* K207°	Introduction to Visual Basic	4
	GRAND TOTAL	14
°Course has a rev	and an effective of the second state of the se	

°Course has a prerequisite. Student should check course description.

The English Competency Requirement is met by placement into ENG\* K101, transfer credit, or completion of ENG\* K096.

#### Business Information Systems Core, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1.demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Business Information Systems.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Business Information Systems

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

#### **Business Information Systems**

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)

11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356

#### Associate in Science

Program Coordinator: Betti Gladue - 860-215-9430

This program provides students with supplemental skills and knowledge that can be useful in a broad range of business management positions. In addition, the program prepares graduates for a more specialized positions in business information system and provides the background for transfer into bachelors degree programs in this area.

#### **BUSINESS INFORMATION SYSTEMS CURRICULUM**

Business

Course ID	Title of Course	Credits
SEMESTER I	Duincialas of Managementing	ŋ
ECN* K101°	Principles of Macroeconomics	3 3 3 3
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
	Fine Arts Elective	
	TOTAL	12
SEMESTER II	Beel faire i	
ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3 3 3 3
BBG* K231°	Business Law I	3
BBG* K210°	Business Communication	3
BMG* K202°	Principles of Management	
	TOTAL	16
SEMESTER III		
BFN* K201°	Principles of Finance	3
CSC* K108°	Introduction to Programming	4
ENG* K102°	Literature and Composition	4 3 3 3
MAT* K172°	College Algebra	3
PSY* K247°	Industrial and Organizational Psychology	3
	TOTAL	16
SEMESTER IV		
BMK* K201°	Principles of Marketing	3
CSA* K205°	Advanced Applications	3 3 4 3
CSC* K207°	Introduction to Visual Basic	4
ECN* K102°	Principles of Microeconomics	
	Natural Sciences Elective with lab	4
	TOTAL	17
	GRAND TOTAL	61

° Course has a prerequisite. Students should check course description.

#### Business Information Systems, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Business Information Systems.

2. demonstrate knowledge of those principles and skills appli cable to general business and those specific to the field of Business Information Systems.

 demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.
 have obtained a well rounded general education.

5. be prepared for employment in the field of Business Information Systems.

#### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

# Business Information Systems Certificate Program

# **Certificate Program**

Program Coordinator: Betti Gladue - 860-215-9430

This 27-29 credit hour certificate program is designed for students who seek to acquire the basic working skills to enter a business, wish to expand their opportunities and choices, and/or transfer to Eastern or another 4-year university.

Students may complete this certificate by completing the courses that are listed below.

# BUSINESS INFORMATION SYSTEMS CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BBG* K115°	Business Software Applications	3
CSA* K205°	Advanced Applications	3
CSC* K108°	Intro to Programming	4
CSC* K207°	Introduction to Visual Basic	4
ENG* K101°	Composition	3
Restricted Electives (Please select 3 from the following list of courses)		10-12
ACC* K111°	Principles of Accounting I	
ACC* K118°	Managerial Accounting	
BMG* K202°	Principles of Management	
BMK* K201°	Principles of Marketing	
<b>CST</b> * K175°	Network Administration & Support	
<b>CST</b> * K176°	Internet Technologies	
	GRAND TOTAL	27-29
° Course has a rer	ana mulaita. Ctuala ata ala aulal ala alu anu	

° Course has a prerequisite. Students should check course description.

# Business Information Systems, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate a fundamental understanding of a computer's operating system with regard to file management, system tools and the customization of the computing environment. design, develop and implement programs to solve various 2. data processing problems using the current programming language and Visual Basic.

3. demonstrate use of computer applications including word processing, spreadsheets, presentation software, database management, and Internet browser software to enhance personal productivity.

# Business Information Systems Core Certificate Program

# **Certificate Program**

Program Coordinator: Betti Gladue - 860-215-9430

This 14 credit hour certificate program is designed for students who seek to acquire the basic working skills to enter a business, wish to expand their opportunities and choices, and/or transfer to Eastern or another 4-year university. Students may complete this certificate by completing the courses that are listed below.

English Competency Requirement met by:

# BUSINESS INFORMATION SYSTEMS CORE CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BBG* K115°	Business Software Applications	3
CSC* K108°	Intro to Programming	4
CSA* K205°	Advanced Applications	3
<b>CSC* K207°</b>	Introduction to Visual Basic	4
	GRAND TOTAL	14

°Course has a prerequisite. Student should check course description.

The English Competency Requirement is met by placement into ENG\* K101, transfer credit, or completion of ENG\* K096.

# Business Information Systems Core, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Business Information Systems.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Business Information Systems

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

# **Business Management Core**

#### **Certificate Program**

Program Coordinator: Larry Flick - 860-215-9426

This 15 credit hour certificate program is designed for students who seek concentrated study in the field of management. Practical application to job situations will be stressed. Students may complete this certificate by completing the courses that are listed below.

#### **BUSINESS MANAGEMENT CORE CERTIFICATE CURRICULUM**

English Competency Requirement met by: \_

	Course ID	Title of Course	Credits	
	BMG* K202°	Principles of Management	3	
	BMG* K205°	Quantitative Business Analysis	3	
	BMG* K210°	Organizational Behavior	3	
	BMG* K218°	Operations Management	3	
	BMG* K220°	Human Resources Management	t 3	
	<b>GRAND TOTAL</b>	15		
°Course has a prerequisite. Students should check course				
description				
The English Competency Requirement is met by placement				
	into ENG* K101	, a transfer credit, or completion	of ENG* K096.	

#### Business Administration Core, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

 demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Business Administration.
 demonstrate knowledge of those principles and skills appli cable to general business and those specific to the field of Business Administration.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

# **Civil Engineering Technology**

#### Accredited by the Technology Accreditation Commission of ABET http://www.abet.org Associate in Science

Program Coordinator: Diba Khan-Bureau - 860-215-9443

This program prepares students with skills necessary for employment as civil engineering technicians with consulting firms, testing laboratories, utilities, and local, state and federal government agencies. Emphasis is placed on such tasks as: surveying, materials testing, drafting, construction inspection, design and erection of structures, transportation, water supplies and sewage treatment.

# CIVIL ENGINEERING TECHNOLOGY CURRICULUM-TAC/ABET ACCREDITED

(suggested two-year sequence)

Course ID SEMESTER I	Title of Course	Credits
CIV* K101°	Introduction to Civil Engineering and Materials	3
CIV* K150°	Surveying I	3
CIV* K151°	Surveying I Lab	1.5
COM* K173°	Public Speaking	(3)
ENG* K101°	Composition	3
MAT* K172°	College Algebra	(3)
PHY* K114°	Mechanics	(4)
TOTAL	10.5	(4)
SEMESTER II	10.5	
CIV* K203°	Civil Hydraulics	3
CIV* K250°	Surveying II	3
CIV* K251°	Surveying II Lab	1.5
ENG* K202°	Technical Writing	3
MAT* K186°	Precalculus	4
MEC* K114°	Statics	3
	TOTAL	17.5
SEMESTER III		17.5
	Water Resources Engineering	3
	Water Resources Engineering Lab	ĩ
ENV* K101	Environmental Studies	3
ENV* K265°	Fundamental Measurements and Applications Lo	-
MAT* K254°	Calculus I	4
MEC* K250°	Strength of Materials	3
MEC RESU	Civil/Environmental Engineering Technical Elective	
·	TOTAL	20
SEMESTER IV		20
CAD* K106/CAD* K1	07	
Computer-Aided Draf	ting with Lab	3
CIV* K200°	Capstone Soils	3
CIV* K201°	Capstone Soils Lab	1
ENV* K110°	Environmental Regulations	3
	Civil/Environmental Engineering Technical Elective	e† 3
	Humanities/Social Sciences elective	3
	Math/Science Elective	3
	TOTAL	19
	GRAND TOTAL	67

- ° Course has a prerequisite. Students should check course description.
- () Course is considered a prerequisite for this technology degree.
- + Any CIV\* or ENV\* course (STRONGLY recommend CIV\*, ENV\*, GIS\* K146, Intro to GIS as a Semester III elective). Other courses include BIO\* K121, CHE\* K111, ARC\* K214, ARC\* K241/241L(3.5 credits), any CAD\* course (except CAD\* K106/107 which is required), or MEC\* course with the permission of the Program Coordinator.

# Civil Engineering Technology, Associate in Science Degree Program Objectives

Graduates of the program in Civil Engineering Technology will: 1. be qualified to make technical and creative contributions in the civil engineering field and find employment in design, construction and maintenance of the physical and naturally built environment in the practice of civil engineering technology.

2. have an appreciation for the need to be lifelong learners. demonstrate professionalism and a sense of societal and ethical responsibility in their professional endeavors. engage in professional development or study in a four-year program to pursue flexible career paths amid future technological changes.

# Civil Engineering Technology, Associate in Science Degree Program Outcomes

By the time of graduation, students in the Civil Engineering Technology program will:

1. practice the skills needed to work effectively in teams and as an individual.

2. demonstrate the ability to use appropriate mathematical, computational and technical-thinking skills needed for civil engineering technology applications.

3. Combine oral, technical and written communication skills to present and exchange information effectively and communicate design solutions.

4. know of a professional code of ethics

5. describe concepts relating to design, construction, operation or maintenance, infrastructure, policy, processes and continuous improvement.

5. describe how the concepts of planning, design, construction operation or maintenance of the built environment and global infrastructure affect evaluation of analysis, policies and decision making.

6. illustrate an ability to think critically and identify, evaluate and solve complex civil engineering technological problems;7. demonstrate technical and provide practical applications in problem and solutions; and communicate solutions technically and effectively.

 recognize actions and acts of professionalism that allow them to become informed and participating citizens cognizant of ethics, civic duty and social responsibility.
 recognize the need to be lifelong learners.

# **Civil Engineering Technology**

# Surveying and Mapping Technician Certificate Program

# **Certificate Program**

Program Coordinator: Diba Khan-Bureau - 860-215-9443

This 27.5 credit certificate program is designed to provide students with entry-level skills required to fill technician jobs in the areas of measuring and mapping the earths surface and establishing official land, airspace and water boundaries. This certificate gives students the opportunity to discover the fundamentals of surveying and mapping along with the establishing foundational skills used to execute engineering calculations. This two-semester certificate consists of courses that will enable students to apply these skills in one of the fastest growing fields. Employment of surveyors and mapping technicians is expected to grow 19% from 2008 to 2018, which is faster than the average for all occupations (Bureau of Labor Statistics). Having a surveying and mapping certificate will afford students the opportunity to obtain work or continue their education to acquire an A.S. or an advanced degree. Surveying and mapping are integral in infrastructure building, all phases in construction and environmental planning and land-use in the United States today. In today's economy and in the consideration of the "new" paradigm of re-surveying and mapping the Earth this certificate is very timely.

Students may complete this certificate by completing the courses that are listed below.

# SURVEYING AND MAPPING TECHNICIAN CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I		
ARC* K241/K241L°	Site Analysis and Lab	3.5
CIV* K146/GIS* K14	46	Intro to
GIS and Lab		3
CIV* K150/K151L°	Surveying I and Lab	4.5
MAT* K137°	Intermediate Algebra	3
	TOTAL	14
SEMESTER II		
CAD* K106/K107	Computer-Aided Drafting and Lab	3
CIV* K250/K251°	Surveying II and Lab	4.5
ENV* K110°	Environmental Regulations	3
+	Directed Elective +	3
	TOTAL	13.5
	GRAND TOTAL	27.5

° Course has a prerequisite. Students should check course description.

+ Directed Electives: See advisor for course suggestions. (ARC\* K214, CAD\* K214/215L°, ENV\* K101, ENV\* K130, ENV\* K295)

#### Surveying and Mapping Technician, Certificate Program Outcomes

Graduates of the Surveying and Mapping Technician certificate program will:

1. an ability to apply knowledge of mathematics, science and applied science.

2. an ability to design experiments and conduct experiments as well as analyze and interpret data.

3. an ability to function on multi-disciplinary teams.

4. an ability to identify and solve applied science problems.

5. an understanding of professional and ethical responsibility. 6. an ability to communicate effectively.

7. the broad education necessary to understand the impact of solutions in global and societal context.

 an ability to use the techniques, skills, modern scientific and technical tools necessary for surveying and mapping practice.
 the ability to function as effective individuals.

10. a recognition of the need for and the ability to engage in life-long learning.

# Computer Applications Certificate Program

# **Certificate Program**

Program Coordinator: Allan Anderson - 860-215-9403 George Volkov - 860-215-9483

This 30-credit certificate program has been designed to prepare students for employment in various computer support positions, from designing the screen layout for data entry operation to a webpage for a small company.

Students may complete this certificate by completing the courses that are listed below.

# COMPUTER APPLICATIONS CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
CSA* K105	Introduction to Software Applications	3
CSA* K205°	Advanced Applications	3
CST* K153°	Web Development & Design I	4
<b>CST* K232°</b>	Communications and Networking	4
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3
MAT* K135°	Topics in Contemporary Math	
or	or	3
HIGHER MATH		
	Open Elective	3
	GRAND TOTAL	30

° Course has a prerequisite. Students should check course description.

#### **Computer Applications, Certificate Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. read and prepare standard types of business communications.

2. demonstrate a high level of skill in the use of word processing software.

 use computer software to create an effective presentation.
 use spreadsheet software to create sophisticated worksheets and graphs.

5. use database application software to create, update and query a database.

6. integrate text and objects produced in word processing, spreadsheet, database management, and presentation software applications with Internet resources to create documents.

7. plan, design, develop, and maintain professional Web sites using HTML and Web page development software, and create and optimize images and animation.

8. demonstrate understanding of network technology protocols, including structure, communication, architecture and standards.

9. demonstrate appropriate interpersonal, human relations skills.

# **Computer Science Technology**

# Associate in Science

Program Coordinators: Allan Anderson - 860-215-9403 George Volkov - 860-215-9483

This 66 credit program is designed to provide students with skills consistent with entry-level computer programming and related jobs. The core curriculum combined with technical electives gives the student the flexibility to design a preferred track of concentration. Many students will seek employment as entry-level programmers immediately upon receiving the Associate Degree in Computer Science; however, others will use this as a first step in their pursuit of higher degrees at other institutions.

# COMPUTER SCIENCE TECHNOLOGY CURRICULUM

Course ID SEMESTER I	Title of Course	Credits
CSC* K108°	Introduction to Programming	4
ENG* K101°	Composition	3
COM* K173°	Public Speaking	3
MAT* K172°	College Algebra	(3)
MAI KIZ	Technical Elective	(3)
	TOTAL	3 13
CEMECTED II	TUTAL	15
SEMESTER II CSC* K207°	Introduction to Visual Basic	4
		4
CST* K232°	Communications and Networking	4
ENG* K202°	Technical Writing	3
MAT* K186°	Precalculus	4
	Fine Arts or Humanities Elective	3
	TOTAL	18
SEMESTER III		
CSC* K215°	Object Oriented Programming with C++	
or	or	4
CSC* K223°	Java Programming I	
CSC* K233°	Database Development I	4
MAT* K254°	Calculus I †	4
MAT* K210°	Discrete Math	3
	Technical Elective	3
	TOTAL	18
SEMESTER IV		
CSC* K216°	Intermediate C++ Programing	
or	or	4
CSC* K224°	JAVA Programming II	•
	Social Science Elective	3
MAT* K256°	Calculus II †	4
	Technical Elective	3
	Natural Science Elective	3
	TOTAL	17
	GRAND TOTAL	66
° C		00

° Course has a prerequisite. Students should check course description.

() MAT\* K172 is considered a prerequisite for this technology program.

+ Students not seeking to transfer to a four-year institution may substitute Technical Elective(s) for one or both calculus courses.

Technical Electives: ACC\* K111°, ACC\* K112°, CSC\* K208°, CSC\* K218°, CSC\* K224°, CSC\* K234°, CSC\* K235°, CSC\* K241°, CSC\*

K283°, CSC\* K295°, CST\* K141°, CST\* K153°, CST\* K175°, CST\* K176°, CST\* K177°, CST\* K232°, CST\* K251°, CST\* K253°, CST\* K275°, EET\* K134/135°, EET\* K254/255°, EET\* K258/259°, GRA\* K260°, MAT\* K167°, MAT\* K268°, MAT\* K272°, MAT\* K285°. Note: a second natural science elective may be used as a technical elective.

# Computer Science Technology, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. analyze and solve problems in computing

2. demonstrate entry level programming ability in structured and object-oriented programming languages.

3. model, design, implement and program a database.

4. explain network technology protocols, including structure, communication, architecture and standards.

5. explain the role of the Internet, Intranet and Internet tools in business and how these technologies are applied to improve efficiency and maximize profits.

6. apply critical thinking skills acquired across the curriculum.

 exhibit both oral and written technical communication skills.
 transfer successfully to a 4 year college or university or obtain employment in an information technology field.

# Networking Technology Certificate

# **Associate in Science**

Program Coordinator: Allan Anderson - 860-215-9403 George Volkov - 860-215-9483

The Networking Technology Certificate program will provide students with marketable skills that grow increasingly crucial in the present technological age. Networking Technology courses are hands-on and offer students and opportunity to develop knowledge an skills in networking technologies. After completing the Networking Technology Certificate Program, students will be eligible to take the CompTIA Network+, i-Net+, Server+, and Security+ Certification exams. Students may complete this certificate by completing the courses that are listed below.

# NETWORKING TECHNOLOGY CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I (FALL)		
CST* K175°	Networking Administration Support	4
CST* K176° ##	Internet Technologies	4
ENG* K101°	Composition	3
MAT* K135°	Topics in Contemporary Math	
or	or	3
	Higher Math	
SEMESTER II (SPRIN	G)	
<b>CST</b> * K177° ##	Server Technologies	4
CST* K275°##	Information Security	4
ENG* K202°	Technical Writing	3
	GRAND TOTAL	25
° Course has a prerequisite. Students should check course		
description.		
## Technical Elective in Computer Science Technology Associ-		
ate degree		

#### **Networking Technology, Certificate Program Outcomes** Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate an understanding of the typologies and functions of local and wide area networks, intranets, and internets and the Internet.

2. implement and administer network operating systems, network security, user accounts and file sharing, backups and data redundancy, servers, software licensing, network monitoring and virus protection.

3. install and support network components, including modems, hubs, network adapters, switches, repeaters and routers.

 understand and be able to describe network protocols, structures, communication architecture and standards.
 recognize and explain networking terminology, components, and applications.

# Web Design and Development Certificate

# Associate in Science

Program Coordinator: Allan Anderson - 860-215-9403 George Volkov - 860-215-9483

The Web Design and Development Certificate Program will provide students with marketable skills that grow increasingly crucial in the present technological age. Web Design and Development courses are strictly hands-on and offer students an opportunity to create their own web site with web development software. Students will acquire the skills to master wizards, templates and other features of popular software packages. After completing the Web Design and Development Certificate Program, students will be able to design professional web pages, create and optimize images and animations, and manage complex web sites.

Students may complete this certificate by completing the courses that are listed below.

# WEB DESIGN AND DEVELOPMENT CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I CST* K153°	Web Development and Design	4
GRA* K140°	Publication Design	г
or	or	3
GRA* K230°	Digital Imaging	
ENG* K101°	Composition	3
MAT* K135°	Topics in Contemporary Math	
or	or	3
	Higher Math	
SEMESTER II		
CST* K252°	Web Development & Design II	4
CST* K253°	Web E-Commerce	4
ENG* K202°	Technical Writing	3
GRA* K260°	Web Design	3
	GRAND TÕTAL	27

° Course has a prerequisite. Students should check course description.

# Web Design and Development, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate an understanding of and familiarity with web graphics.

2. demonstrate an understanding of and a familiarity with fundamental network environment concepts.

3. demonstrate an understanding of and familiarity with web site development requirements, skills and techniques, and web site design principles.

4. demonstrate an understanding of and familiarity with emerging web technologies.

5. demonstrate an understanding of and familiarity with e-commerce solutions.

6. demonstrate an understanding of and familiarity with the requirements for promoting and maintaining a web site online.

7. demonstrate an understanding of and familiarity with web programming languages, including markup and scripting languages.

# Construction Management Technology

# **Associate in Science**

Program Coordinator: Mark Comeau - 860-215-9415

The objective of the Construction Management Technology program is to provide students desiring a career in the construction industry with entry-level skills. The Associate in Science degree introduces students to a broad range of courses required for basic performance in offices which support the construction industry, including construction companies, architecture and engineering firms. Course subjects include construction drawings and documentation, computer-aided design, building materials and codes, site and environmental appreciation and in addition, students will gain exposure to the principal concepts of accounting and management.

# CONSTRUCTION MANAGEMENT CURRICULUM

(suggested 2 year sequence)

Course ID	Title of Course	Credits
SEMESTER I		,
ARC* K135	Construction Graphics	1
ARC* K135L	Construction Graphics Lab	2
ENG* K101°	Composition	3
MAT* K172°	College Algebra	3
PHY* K114°	Mechanics	4
	Fine Arts Elective	3
	TOTAL	16
SEMESTER II		
ARC* K221	Contracts and Specifications	3
BMG* K202°	Principles of Management	3
CIV* K150°	Surveying I	3
CIV* K151°	Surveying I Lab	1.5
ENV* K101	Environmental Studies	3
	Technical Elective	3
	TOTAL	16.5
SEMESTER III		
ARC* K108	Building Materials	3
ARC* K227°	Building Codes and Ordinances	3
CAD* K214°	CAD- Construction	1
CAD* K215°	CAD- Construction Lab	2
CTC* K120	Fundamentals of Construction Management	3
ENG* K202°	Technical Writing	3
MAT* K186°	Precalculus	4
	TOTAL	19
SEMESTER IV		
ACC* K111°	Principles of Accounting I	4
ARC* K241°	Site Analysis	2
ARC* K241L°	Site Analysis Lab	1.5
CTC* K229°	Construction Estimating	3
ECN* K102°	Principles of Microeconomics	3
	Technical Elective	3
	TOTAL	16.5
	GRAND TOTAL	68
° Course has a p	prerequisite. Students should check cou	rse

Course has a prerequisite. Students should check cours description.

# Construction Management, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. succeed in entry level work in construction management well

2. prepared to take advantage of opportunities into supervisory positions.

3. expand their technical knowledge through lifelong learning and, if desired, further higher education.

4. work ethically and responsibly in the construction industry apply their knowledge individually and in teams to solve technical and management problems.

# Construction Management Certificate Program

#### **Certificate Program**

Program Coordinator: Mark Comeau - 860-215-9415

The objective of the Construction Management Certificate program is to provide students desiring a career in the construction industry with entry-level skills. This two-semester certificate program introduces students to a broad range of courses required for basic performance in offices which support the construction industry, including construction companies, architecture and engineering firms. Course subjects include drafting, computer-aided design, building codes, etc. In addition students will gain exposure to the principal concepts of accounting and management.

Additionally, students will attain entry level knowledge in drafting, AutoCad<sup>™</sup>, construction materials and documents, codes, computer applications, and principles of accounting and management. Students completing this certificate will be qualified for employment with construction and development firms, architects, engineers and product suppliers, along with being prepared to transfer into universities offering bachelor degrees in construction management. Students must have ENG<sup>∗</sup> K101 competency equivalent to complete certificate.

Students may complete this certificate by completing the courses that are listed below.

# CONSTRUCTION MANAGEMENT CERTIFICATE CURRICULUM

Course ID SEMESTER I	Title of Course	Credits
ARC* K108°	Building Materials	3
	Construction Graphics and Lab	3
CAD* K106	Computer-Aided Drafting I	1
CAD* K107	Computer-Aided Drafting I Lab	2
ENG* K101°	Composition	3
	Directed Elective (see program coordinator)	3
	TOTAL	15
SEMESTER II		
ARC* K227	Building Codes and Ordinances	3
CTC* K120	Fundamentals of Construction Management	3
CTC* K229°	Construction Estimating	3
MAT* K137°	Intermediate Algebra	3
	Directed Elective (Please select from the follow	wing



courses: ARC* K102, ARC* K137, ARC* K221, ARC* K241)	3
TOTAL	15
GRAND TOTAL	30

° Course has a prerequisite. Students should check course description.

# Construction Management, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. attain mastery of the basic skill sets required for entry level in construction management.

2. provide an education that integrates a core curriculum with construction industry theory, technical background and application elements (for students who will seek advanced and professional training).

3. expand opportunities in the drafting and graphics fields (for those with previous experience in allied areas).

4. become competent in the specific traditional and computer drafting skills required in today's construction industry.

5. demonstrate and apply skills necessary for task management and scheduling.

6. become familiar and productive with industry standard software applications.

7. provide sufficient depth of understanding of construction means, method and assemblies.

adopt and understanding that life-long learning and intellectual growth is an integral part of a career in construction technology due to ever-evolving components and systems.
 demonstrate workplace skills related to the occupation, including but not limited to maintaining a safe and healthy workplace environment and demonstrating workplace ethics and teamwork.

10. apply knowledge of theory and safety to accomplish tasks related to the occupation.

11. identify and use appropriate tools, such as testing and measurement equipment to accomplish tasks related to the occupation.

12. use current reference and training materials from accepted industry publications and standards to accomplish tasks related to the occupation.

IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

# Sustainable Facilities Management Certificate Program

# **Certificate Program**

Program Coordinator: Mark Comeau - 860-215-9415

This 27.5 credit certificate program is designed to provide students with entry-level skills required to fill technician jobs in the areas of sustainable design and planning, and sustainable facilities operations. This two-semester certificate consists of courses that will reinforce existing construction industry workforce with new skill sets while training individuals new to the industry, in the areas of sustainable environment as defined by the U.S. Green Building Council and the Building Performance Institute. This certificate program will provide new opportunities for skilled-displaced workers while building on their previous experience and knowledge, and will play a role in the training of a new workforce essential to building and operating facilities that are energy efficient; utilize renewable energy sources; contribute less to carbon footprint; are constructed of sustainable and green materials, systems and components. This certificate was funded by a USDOL Community-Based Training Grant, as implemented by the Employment and Training Administration.

Students may complete this certificate by completing the courses that are listed below.

# SUSTAINABLE FACILITIES MANAGEMENT CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I		
ARC* K108	Building Materials	3
ARC* K135	Construction Graphics	1
ARC* K135L	Construction Graphics Lab	2
CAD* K106	Computer-Aided Drafting	1
CAD* K107	Computer-Aided Drafting Lab	2
ENG* K101°	Composition	3 3
	Directed Elective (see program coordinator)	3
	TOTAL	15
SEMESTER II		
ARC* K214	Sustainable Design	3
ARC* K225°	Alternative Building Systems	3 3
ARC* K241/241L°	Site Analysis with lab	3.5
ENV* K110°	Environmental Regulations	3
	TOTAL	12.5
	GRAND TOTAL	27.5
0.0		

° Course has a prerequisite. Students should check course description.

# Sustainable Facilities Management, Certificate Program Outcomes

Graduates of the Sustainable Facilities Management certificate program will:

1. attain basic knowledge of sustainable industry theory, technical background, and application elements for facility design, construction, and operations.

2. demonstrate competency in the specific traditional and computer drafting skills required in today's construction industry.

3. be able to identify sustainable design and planning strategies, i.e. building orientation and exposure, natural day ligh4. be able to identify sustainable building products by understanding both upstream production and downstream byproduct effects.

5. understand and be able to adopt a philosophy of life-long learning and intellectual growth, an integral part of a career in sustainable facilities management and its evolving components and systems.

6. be able to practice workplace skills related to functional employment, including but not limited to: basic and necessary arithmetic computations, effective writing and corresponding, maintaining a safe and healthy workplace environment, and workplace ethics and teamwork.

7. identify LEED point assignments and understand their concepts and applicability toward LEED certification.

# **Criminal Justice - Enforcement Option**

# **Associate in Science**

Program Coordinator: Jeffrey Crouch - 860-215-9418

This 66-67 credit program provides education as a basis for employment or further advancement in the criminal justice field. This program is designed for students interested in pursuing careers in an enforcement-oriented nucleus and who plan to transfer to a four-year college. Students are urged to investigate and select the institution to which they will transfer as early as possible since each transfer situation must be planned to meet specific baccalaureate requirements. A minimum of 66 credits is required for graduation.

# **CRIMINAL JUSTICE - ENFORCEMENT CURRICULUM**

Course ID SEMESTER I	Title of Course	Credits
CJS* K101°	Introduction to Criminal Justice	3
CJS* K100	Perspectives in Criminal Justice	0
or	or	3
IDS K105	First Year Experience	0
COM* K173°	Public Speaking	3
ENG* K101°	Composition	3
SOC* K101°	Principles of Sociology	3
JOC RIVI	TOTAL	15
SEMESTER II		15
CIS* K211°	Criminal Law	3
CJS* K213°	Evidence and Criminal Procedure	3
ENG* K102°	Literature and Composition	Ū
or	or	3
ENG* K202°	Technical Writing	-
HIS* K	History Elective	3
PSY* K111°	General Psychology I	3
MAT* K123°	Elementary Statistics or higher ++	3
	TOTAL	18
SEMESTER III		
ANT* K105°	Introduction to Cultural Anthropology $\infty$	
or	or	3
PSY* K245°	Abnormal Psychology $\infty$	
CJS* K201°	Criminology	
or	or	3
CJS* K202°	Juvenile Delinquency	
CJS* K220°	Criminal Investigation	3

CJS* K250°	Police Organization and Administration	3
CJS* K253°	Interpersonal Dynamics for Criminal Justice Professionals	3
	Restricted CJS Elective @	3
	TOTAL	18
SEMESTER IV		
CJS* K225°	Forensic Science	3
CJS* K291°	Criminal Justice Practicum	
or	or	3
CJS* K294°	Contemporary Issues in Criminal Justice	
PHL* K111°	Ethics	3
	Fine Arts Elective +	3
	Natural Sciences Elective ++	3-4
	TOTAL 1	5-16
	GRAND TOTAL	6-67

° Course has a prerequisite. Students should check course description.

+ Students should consult with their advisor for proper course selection.

++ Students wishing to transfer should check MATH/SCIENCE requirements at trasfer institution.

∞ Students wishing to transfer should determine whether PSY\* K245 of ANT\* K105 has more relevance to their anticipated major.

@ Restrcited electives are any any CJS\* elective or POL\* K212 or HPE\* K128.

# Criminal Justice Enforcement, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. identify and explain the basic structures and functions of the criminal justice system.

2. interpret the basic concepts and functions of criminal law. integrate multidisciplinary theories which constitute the basis for understanding criminality and victimization.

3. apply constitutional principles that protect the rights of individuals and regulate criminal justice practices and procedures.

4. discuss the importance of social and ethical issues confronting the criminal justice systems.

Additionally, the graduate will complete the comprehenisve learning outcomes identified within the General Education Component.



# **Criminal Justice - Treatment Option**

# **Associate in Science**

Program Coordinator: Jeffrey Crouch - 860-215-9418

This 66-67 credit program provides a broad overview of the field of criminal justice as well as specialized emphasis on career opportunities, knowledge and skills in areas of treatment. This program is designed for students interested in pursuing careers in a treatment-oriented nucleus and who plan to transfer to a four year college.

# **CRIMINAL JUSTICE - TREATMENT CURRICULUM**

Course ID	Title of Course	Credits
SEMESTER I CJS* K100	Porchastivas on Criminal Justica	
or	Perspectives on Criminal Justice or	3
IDS K105	First Year Experience	3
CJS* K101°	Introduction to Criminal Justice	3
COM* K173°	Public Speaking	
ENG* K101°	Composition	3 3
SOC* K101°	Principles of Sociology	3
JOC KINI	Fine Arts Elective	3
	TOTAL	18
SEMESTER II		10
CJS* K102°	Introduction to Corrections	3
CJS* K202°	Juvenile Delinguency	3
ENG* K102°	Literature and Composition	Ū
or	or	3
5. ENG* K202°	Technical Writing	Ū
MAT* K123°	Elementary Statistics or higher ++	3
PSY* K111°	General Psychology I	3
	TOTAL	15
SEMESTER III		
CJS* K253°	Interpersonal Dynamics for Criminal Justice P	rofes-
sionals	3	
HSE* K181°	Understanding Sexual Abuse	3
HSE* K183°	Substance Abuse	3
POL* K212°	Constitutional Law and Civil Rights	3
PSY* K245°	Abnormal Psychology	3
	Restricted Elective @	3
	TOTAL	18
SEMESTER IV		
CJS* K201°	Criminology	3
CJS* K291°	Criminal Justice Practicum	
or	or	3
CJS* K294°	Contemporary Issues in Criminal Justice	
HSE* K251°	Work with Individuals and Families	3
PHL* K111°	Ethics	3
	Natural Sciences Elective ++	3-4
	TOTAL	15-16
	GRAND TOTAL	66-67

° Course has a prerequisite. Students should check course description.

++ Students wishing to transfer should check Math/Science requirements at transfer institution.

@ Restricted electives are any CJS\* elective or POL\* K212 or HPE\* K128.

# Criminal Justice Treatment, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to: 1. identify and explain the basic structures and functions of the criminal justice system. 2. integrate multidisciplinary theories which constitute the basis for understanding criminality and victimization. 3. apply constitutional principles that protect the rights of individuals and regulate criminal justice practices and procedures. 4. discuss the importance of social and ethical issues confronting the criminal justice systems. 5. explain the fundamental concepts of human services, especially case management, and group work.

Additionally, the graduate will complete the comprehensive learning outcomes identified within the General Educate Component

# Security and Loss Prevention Certificate Program

# **Certificate Program**

Program Coordinator: Jeffrey Crouch - 860-215-9418

This 27 credit certificate program prepares individuals for careers in security and loss prevention. Opportunities for employment in Southeastern Connecticut include work in industrial, corporate, business, retail and nuclear-based firms. Persons already employed in the field may pursue this certificate to upgrade their knowledge and skills while enhancing their career mobility.

Students may complete this certificate by completing the courses that are listed below.

# English Competency Requirement met by: \_

# SECURITY AND LOSS PREVENTION CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
CJS* K101°	Introduction to Criminal Justice	3
CJS* K103°	Introduction to Security	3
CJS* K211°	Criminal Law I	3
CJS* K213°	Evidence and Criminal Procedure	3
CJS* K220°	Criminal Investigation	3
CJS* K230°	Security Management	3
CJS* K231°	Security Procedures	3
CJS* K291°	Criminal Justice Practicum	
or	or	3
	Elective	
ENG* K101°	Composition	3
	GRAND TOTAL	27

The following courses should be taken prior to all others: ENG\* K101, CJS\* K101, CJS\* K103.

The following courses should be taken after CJS\* K101 in the precise order: CJS\* K230, CJS\* K231, CJS\* K211, CJS\* K220, CJS\* K213, CJS\* K291.

° Course has a prerequisite. Students should check course description.

# The English Competency Requirement is met by placement into ENG\* K101 or completion of ENG\* K096.

Criminal Justice

Security Loss and Prevention, Certificates Program Outcomes

Upon successful completion of this program, graduates will be able to:

1. identify and explain the basic structures and functions of the criminal justice system.

 interpret the basic concepts and functions of criminal law.
 apply constitutional principles that protect the rights of individuals and regulate criminal justice practices and procedures.

4. indentify and explain the basic operational roles of private police and the basic theories involved in the supervision of security personnel.

# **Criminal Justice Certificate Program**

# **Certificate Program**

Program Coordinator: Jeffrey Crouch - 860-215-9418

This program provides an opportunity for students to participate in a 30 credit program leading to a certificate in Criminal Justice.

Students may complete this certificate by completing the courses that are listed below.

English Competency Requirement met by:

# **CRIMINAL JUSTICE CERTIFICATE CURRICULUM**

Course ID	Title of Course	Credits
CJS* K101°	Introduction to Criminal Justice	3
CJS* K201°	Criminology	3
CJS* K211°	Criminal Law I	
or	or	3
POL* K212°	Constitutional Law and Civil Rights	
CJS* K213°	Evidence and Criminal Procedure	3
CJS* K220°	Criminal Investigation	3
CJS* K225°	Forensic Science	3
CJS* K250°	Police Organization and Administration	3
ENG* K101°	Composition	3
COM* K173°	Public Speaking	3
	GRAND TOTAL	27

° Course has a prerequisite. Students should check course description.

May be exempted through placement.

The English Competency Requirement is met by placement into ENG\* K101, or transfer credit, or completion of ENG\* K096.

# **Criminal Justice, Certificate Program Outcomes**

Upon successful completion of this certificate program, graduates will be able to: 1. identify and explain the basic structures and functions of the criminal justice system. 2. interpret the basic concepts and functions of criminal law. 3. integrate multidisciplinary theories with constitute the basis for understanding criminality and victimization. 4. apply constitutional principles that protect the rights of individuals and regulate criminal justice practices and procedures. 5. discuss the importance of social and ethical issues confronting the criminal justice system.

# **Early Childhood Education**

Accredited by the National Association for the Education of Young Children (NAEYC). 1313 L St. N.W. Suite 500, Washington DC 20005. (202) 232-8777, (800) 424-2460 www.NAEYC. org

# **Associate in Science**

Program Coordinator: Sheila Skahan - 860-215-9475

This 64 credit program is designed to provide education and experiences as a basis for employment in the field of early childhood working with children ages 0-8 and/or as a two-year educational foundation for students wishing to transfer to a four/five-year teaching certification program. This program prepares students to work in early care and education settings including child care, public school para professionals (K-2) and related human service agencies. Our courses also address the needs of individuals already employed in the area of early education to enhance their profes sional competence and depth of knowledge. The goal of the plan is to create an "accessible pathway for career mobility for early childhood educators." The plan will award a minimum of 18 credits in early childhood education., 3-6 credits in child growth and development and a minimum of 30 credits in General Education. TRCC currently has working relationships with the following colleges: ECSU, SCSU, University of Hartford, Mitchell College, St. Joseph College, Charter Oak State College and The University of Connecticut: Human Development and Family Relations major.

NOTE: To meet state articulation requirements, transfer students must take the following courses: Science: must be a laboratory science; Math: must be MAT\* K136 or higher; History must be HIS\* K201; Open: Computer Science course recommended. Transfer students must have a 2.7 GPA and pass the state mandated skills examination (PRAXIS I) or have an SAT score of 1000, with neither the subtest below 400 points from any test administration on or prior to March 31, 1995, or 1100 or more with no less than 450 on either the verbal or the mathematics subtests from the test administra tions on or after April 1, 1995 or higher before they can be admitted into a university education program. Special Education degree students must take ECE\* K101 and ECE\* K222 to meet transfer requirements.

# EARLY CHILDHOOD EDUCATION CURRICULUM

Course ID	Title of Course	Credits
Early Childhood Educ	ation	
ECE* K101°	Introduction to Childhood Education	3
ECE* K182°	Child Development	
or	or	3
PSY* K200°	Child Psychology	
ECE* K210°	Observation, Participation and Seminar	3
ECE* K215°	The Exceptional Learner	3
ECE* K222°		is 3
		6
		γγ*
		51
		3
ECE* K231° ECE* K295°	Methods and Techniques in Childhood Program Early Language and Literacy Development Student Teaching Practicum ts): Please choose any course in ECE*, EDU*, PS	3 6

Arts and Humanit	ies	
ENG* K101°	Composition	3
IDS K105°	First Year Experience	3
	Fine Arts Elective	
	(as identified in Liberal Arts and Sciences)	3
Science		
HLT* K155°	Personal Health	3
	Science elective with Lab	4
Mathematics		
MAT* K123°	Fundamentals of Statistics or higher	
(MAT* K137 or hi	gher recommended for transfer)	3
Technology		
BBG* K115°	Business Software Applications	
or	or	3
CSA* K105	Introduction to Software Applications	
Social Sciences		
PSY* K111°	General Psychology I	3
SOC* K101°	Principles of Sociology	3
	Any 200 level course in Sociology,	
	Psychology or Ethics	3
о <u>г</u> і	······································	*

Open Elective (3 Credits): Best Choice for Transfer: MAT\* K146°, HIS\* K201°, HIS\* K202, ENG\* K102°, PSY\* K201°, SSC\* K210° and/or any of the following: PSY\* K200°, SOC\* K220°, COM\* K173°, PHL\* K111°, LIB\* K121°, SSC\* K210°.

	3
TOTAL	34
GRAND TOTAL	64

°Course has a prerequisite. Students should check course description.

#### Early Childhood Education, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, 1. graduates will be able to: promote child development and learning by knowing young children's needs and understanding the multiple influences on development and learning. 2. demonstrate an understanding of a variety of current and historical, philosophical and theoretical approaches to early childhood education.

3. build participation of families and communities in the learning and development of children.

4. understand the goals, benefits and uses of observing, docu menting and assessing to support young children and families.

5. know, understand and use supportive interactions to focus on the children's needs and intersts and to build effective environments and routines for children.

6. understand the central concepts of content knowledge in early education and academic disciplines.

7. build meaningful curriculum using own knowledge and re sources to design and implement problem-solving, creative thinking, academic and social competence.

8. identify and involve oneself with the professional early child hood field by upholding ethical standards and engaging in informed advocacy for children and the profession.

# Early Childhood Education Certificate Program

# **Certificate Program**

Program Coordinator: Sheila Skahan - 860-215-9475

This program offers entering students and those already employed in the childcare field an opportunity to increase their knowledge and update their skills. Students may complete this 30 credit program by completing the courses that are listed below.

Students may complete this certificate by completing the courses that are listed below.

# EARLY CHILDHOOD CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ECE* K101°	Introduction to Childhood Education	3
ECE* K182°	Child Development	3
ECE* K210°	Observation, Participation & Seminar	3
ECE* K215°	The Exceptional Learner	3
ECE* K290°	Student Teaching I	3
ECE*	Early Childhood Elective (see program coordinato	r) 3
ECE*	Early Childhood Elective (see program coordinato	r) 3
ENG* K101°	Composition	3
<b>PSY</b> * K111°	General Psychology I	3
<b>SOC</b> * K101°	Principles of Sociology	3
	GRAND TOTAL	30

° Course has a prerequisite. Students should check course description.

# Early Childhood Education, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

explain the development of the child from conception to early adolescence in all areas, including personal and social, physical, cognitive and creative development.

explain the theory, curriculum, and organization of childcare programs working with children 0-8.

plan a basic integrated curriculum for the learning development of the child from 0-8.

understand the goals, benefits and uses of observing, documenting, and assessing to support young children and families.

recognize the special needs of children and use supportive interactions to focus on the child's needs and interests. demonstrate the ability to work in an early childcare setting by planning curriculum, interacting positively with children and demonstrating professional standards.

# **E-Commerce**

# **Associate in Science**

Program Coordinator: Betti Gladue - 860-215-9430

In this 60-61 degree credit program students will obtain a working knowledge of E-Commerce as well as expertise in the area of web, programming, and databases. They will learn how to develop and maintain websites and become competent in the other aspects of business, technology, and the worldwide web.

E-Commerce involves many different technical and business skills. The occupational field of E-Commerce will be of the fastest growing in the industry.

# E-COMMERCE CURRICULUM

Course ID SEMESTER I	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
MAT* K123°	Elementary Statistics	3
MAL KIZJ	TOTAI	16
SEMESTER II		10
BMG* K202°	Principles of Management	3
BMK* K201°	Principles of Marketing	3
CSC* K108°	Introduction to Programming	4
CST* K153°	Web Development and Design I	4
	Social Sciences Elective	3
	TOTAL	17
SEMESTER III	TUTAL	17
BBG* K294°	Rusinoss Internshin	
	Business Internship	
or	or Business Elective	3
		3
or	Or Computer Science Elective	
COM* 1/1700	Computer Science Elective	n
COM* K173°	Public Speaking	3
CSC* K233°	Database Development I	4
GRA* K155°	Advertising Design	3
	TOTAL	13
SEMESTER IV	<b>D</b> • 1 1	0
BBG* K231°	Business Law I	3
CST* K253°	Web E-Commerce	4
CST* K275°	Information Security	4
	Natural Sciences Elective	3-4
	TOTAL	14-15
° Course has a	GRAND TOTAL	60-61

° Course has a prerequisite. Students should check course description.

# E-Commerce, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. understand the use of current accounting systems and procedures.

 understand and use Microsoft Suite application software; fundamental concepts underlying the current database technology; and Web Design and Development concepts.
 understand the fundamental legal principles and their

applications to business transactions and to individual rights and obligations.

4. understand the fundamental principles of management and business operations.

5. understand marketing research and consumer behavior in the formulation of marketing strategies.

6. understand computer design, programming, information processing and algorithmic problem solving.

7. understand the essentials of electronic commerce including electronic purchase order and invoicing, electronic commerce security, electronic payment systems and basic network security.

# **E-Commerce**

# **Certificate Program**

Program Coordinator: Betti Gladue- 860-215-9430

This 29 credit certificate program provides the foundation for students to have an introductory knowledge of the management of the web, programming and databases. Students who earn their certificate will gain a better understanding of aspects in business, technology and the worldwide web. All courses in this certificate may be applied toward the E-Commerce Associates degree.

Students may complete this certificate by completing the courses that are listed below.

# E-COMMERCE CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I		
BBG* K115°	Business Software Applications	3
BMK* K201°	Principles of Marketing	3
CSC* K108°	Intro to Programming	4
CST* K153°	Web Development and Design I	4
	TOTAL	14
SEMESTER II		
ACC* K111°	Principles of Accounting	4
BBG* K231°	Business Law I	3
CSC* K233°	Database Development I	4
<b>CST</b> * K253°	Web E-Commerce	4
	TOTAL	15
	GRAND TOTAL	29
0 0 1		

° Course has a prerequisite. Students should check course description.

#### E-Commerce, Certificate Program Outcomes

Upon successful completion of all program requirements graduates will be able to:

1. go on to wide-ranging careers in business or computer science as well as e-commerce entrepreneurship.

develop technical skills in computer literacy, internet marketing and e-commerce, internet security, website development, business law, database technology, and internet business model, includign a well-rounded understanding of business.
 develop, design and implement business and computer related programs to solve various data processing problems using the current programming language.

# **Electrical Engineering Technology**

Accredited by the Technology Accreditation Commission of ABET http://www.abet.org Associate in Science

Program Coordinator: Daniel Courtney - 860-215-9417

For over 30 years, the Electrical Engineering Technology program has been supplying qualified technicians for Connecticut industry as well as for firms throughout the New England area. The Electrical Engineering Technology program is one of four programs accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

In the program, an intensive study is made of the fundamentals of electric circuits, solid state electronics, and their application in the electronic circuits and control systems. This study prepares the graduates for employment in a variety of electronic technology positions, as well as transfer to baccalaureate engineering technology programs. Due to major impact of the computer in our society, the curriculum includes a concentration on digital circuits and digital control systems. In addition to the electrical specialties, the student in this technology studies a core of related courses such as physics and advanced mathematical applications. To meet the requirements of the degree the student also pursues studies in the humanities and social sciences. Excellent transfer programs exist throughout New England for graduates who wish to continue on to a four-year degree.

# ELECTRICAL ENGINEERING TECHNOLOGY CURRICULUM-TAC/ABET ACCREDITED

(suggested two-year sequence)

Course ID SEMESTER I	Title of Course	Credits
CAD* K106	Introduction to Computer Aided Drafting	1
CAD* K100	Introduction to Computer-Aided Drafting	2
	Introduction to Computer-Aided Drafting Lab	2
EET* K105°	Electric Circuits and Systems	
EET* K106°	Electric Circuits and Systems Lab	1
ENG* K101°	Composition	3
MAT* K172°	College Algebra	(3)
PHY* K114°	Mechanics	(4)
	TOTAL	10
SEMESTER II		
EET* K119°	Advanced Circuits and Systems	3
EET* K120°	Advanced Circuits and Systems Lab	1
EET* K134°	Electronics I	3
EET* K135°	Electronics I Lab	1
ENG* K202°	Technical Writing	3
MAT* K186°	Precalculus	4
PHY* K115°	Heat Sound Light	4
	TOTAL	19
SEMESTER III	TOME	17
EET* K254°	Digital Electronics I	3
EET* K255°	Digital Electronics I Lab	1.5
EET* K264°	Data Acquisition and Control	3
EET* K265°		1
	Data Acquisition and Control Lab	
EET* K274°	Electronic Communication Systems	3
EET* K275°	Electronic Communication Systems Lab	1

MAT* K167°	Principles of Statistics	3
	Fine Arts Elective	3
	TOTAL	18.5
SEMESTER IV		
COM* K173°	Public Speaking	3
EET* K258°	Microprocessors & Controls	3
EET* K259°	Microprocessors & Controls Lab	1.5
EET* K266°	Advanced Controls and Robotics	3
EET* K <b>267</b> °	Advanced Controls and Robotics Lab	1
TCN* K291°	Interdisciplinary Capstone Design Project	3
	Humanities/Social Sciences Elective	3
	TOTAL	17.5
	GRAND TOTAL	65

° Course has a prerequisite. Students should check course description.

() Course is considered a prerequistie for this technology degree.

# Electrical Engineering Technology, Associate in Science Degree Program Objectives

Graduates of the program in Electrical Engineering will: 1. make technical and creative contributions and find employment in electrical engineering technology.

2. appreciate the need to be life long learners.

3. demonstrate professionalism and a sense of social and ethical responsibility in their work.

4. engage in professional development or study in a four-year program to pursue flexible career paths amid future technological changes.

#### Electrical Engineering Technology, Associate in Science Degree Program Outcomes

By the time of graduation, students in the Electrical Engineering Technology program will:

1. practice the skills needed to work effectively in teams and as an individual.

2. demonstrate the ability to use appropriate mathematical, computational and technical-thinking skills needed for engineering technology applications.

3. Combine oral, technical and written communication skills to present and exchange information effectively and to direct activities involving electrical technology.

4. know of a professional code of ethics.

5. describe concepts relating to quality, timeliness and continuous improvement.

6. describe how the concepts of electric circuits, electrical measurements, digital electronic devices, programmable logic circuits, electrical measurements, digital electronic devices, programmable logic circuits, electromechanical and automated systems, affect the design, maintenance and operation of electrical systems.

 illustrate an ability to think critically and identify, evaluate and solve complex technical and non-technical problems; demonstrate creativity in designing problem solutions; and conduct and interpret experimental data and outcomes.
 recognize actions and acts of professionalism that allow them to become informed and participating citizens cognizant of ethics, civic duty and social responsibility.
 recognize the need to be lifelong learners

FOR COMPLETE AND UP-TO-DATE ACADEMIC INFORMATION, VISIT WWW.THREERIVERS.EDU

# **Engineering Science**

# A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven.

The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

# **Associate in Science**

Contact: Patrick Knowles- 860-215-9445

The "Engineering Science Pathway" consists primarily of coursework in engineering, mathematics, and the sciences. In addition to the 68-credit core of courses shown below, a grade average of "B" with no grade less than a "C" is required for continuation at UConn's School of Engineering, or University of New Haven.

The "Engineering Science Pathway" focuses upon building a foundation in the fields of mechanical, industrial, or civil engineering. Graduates will receive a background in mathematics, science and general education courses for transfer into a four-year program. Engineering Science also offers students currently employed in technical positions an opportunity to retrain and upgrade their technical skills. Differences in various areas of specialization in engineering allow students to choose electives with reference to their programs of study. Core courses in Engineering Science may be offered at other Connecticut Community Colleges in cooperation with Three Rivers. ENGINEERING SCIENCE CURRICULUM

Course ID	Title of Course	Credits
<b>GENERAL EDUCATIO</b>	N:	
Semester I		
ENG* K101°	Composition	3
CHE* K121°	General Chemistry I with Lab	4
PHY* K221°	Calculus Based Physics I with Lab	4
MAT* K254°	Calculus I	4
EGR* K111	Intro to Engineering	3
	Total	18
SEMESTER II		
CHE* K122°	General Chemistry II with Lab	4
ENG* K102°	Literature and Composition	3
PHY* K222°	Calculus-based Physics II with Lab	4
MAT* K256°	Calculus II	4
+	Fine Arts Elective (art, music)	3
	Total	18
SEMESTER III		
MAT* K285°	Differential Equations	3
EGR* K211°	Engineering Statics	3
MEC* K150	Solid Modeling I	1
MEC* K151	Solid Modeling I Lab	2

PHL* K111°	Ethics	3
+++	Social Sciences Elective	3
	Total	15
SEMESTER IV		
MAT* K268°	Calculus III	4
CSC* K108°	Introduction to Programming w/Lab	4
EGR* K212°	Engineering Dynamics	3
++	History Elective	3
	Technical Elective	3
	Total	17
	GRAND TOTAL	68

° Course has a prerequisite. Students should check course description.

+ ARC\* K102, ART\* K101, ART\* K102, ART\* K260 or MUS\* K101 recommended for transfer to UCONN.

++ HIS\* K201 or HIS\* K202 recommended for transfer to UCONN

+++ ANT\* K101, ECN\* K101, ECN\* K102 or PSY\* K112 recommended for transfer to UCONN

#### Engineering Science, Associate in Science Degree Program Outcomes

By the time of graduation, students in the Engineering Science program will:

1. transition seamlessly into a Bachelor of Science Degree Program in Engineering with Junior level status in the receiving institution as part of the Engineering Science Pathway Program.

2. demonstrate the ability to assist in research, development, design, production, testing and various other functions associated with engineering.

3. demonstrate a good understanding of engineering principles/concepts.

4. demonstrate a good understanding of mathematical concepts.

 5. demonstrate good working knowledge of state-of-the-art hardware and software in support of engineering design.
 6. demonstrate the ability to think through a problem in a logical manner.

7. organize and carry through to conclusion the solution to a problem.

8. demonstrate good communication skills

9. demonstrate teamwork skills.

# **Environmental Engineering Technology**

Accredited by the Technology Accreditation Commission of ABET http://www.abet.org Associate in Science

Program Coordinator: Diba Khan-Bureau - 860-215-9443

The Environmental Engineering Technology program is designed to educate students in the general and technical aspects of environmental issues and common practice environmental procedures. The degree focuses on practical education with classes covering the basic quantitative and conceptual skills required of environmental engineering technicians. The student population for this program varies from recent high school graduates to retraining students to post-associate degree students looking for career change. The curriculum is broad-based to meet the demands of a range of environmental positions. Graduates have gone on to work for manufacturing firms, regulatory agencies, and as consultants or have continued their education at baccalaureate institutions. Due to the expanding environmental industry and high levels of environmental concern in Connecticut, this program has been in great demand.

# ENVIRONMENTAL ENGINEERING TECHNOLOGY CURRICULUM- TAC/ABET ACCREDITED

(suggested two-year sequence)

Course ID SEMESTER I	Title of Course	Credits
ENG* K101°	Composition	3
ENV* K101	Environmental Studies	3
ENV* K146	Introduction to GIS	3
ENV* K172°	Environmental Research Project I	1
ENV* K220°	Hazardous Materials@	(3@)
ENV* K265°	Fundamental Measurements and Applications	
MAT* K172°	College Algebra	Lubb
or	or	3-4
MAT* K186°	Precalculus	01
	TOTAL	16-17
SEMESTER II		1017
BMG* K202°	Principles of Management	3
CIV* K203°	Civil Hydraulics	
ENG* K202°	Technical Writing	3 3 3
ENV* K110°	Environmental Regulations	3
ENV* K277°	Environmental Research Project II	1
MAT* K186°	Precalculus	
or	or	4
MAT* K254°	Calculus I	
	TOTAL	17
SEMESTER III		
BIO* K121°	General Biology I	4
CHE* K121°	General Chemistry I	4
ENV* K280°	Environmental Surveying	3
	Water Resources Engineering	3
	<sup>•</sup> Water Resources Engineering Lab	1
ENV* K278°	Environmental Research Project III	1
MAT* K167°	Principles of Statistics	3
	TOTAL	19

SEMESTER IV	
DIA: 1/1 000	

General Biology II	
or	4
Microbiology	
General Chemistry II	4
Capstone Soils	3
Capstone Soils Lab	1
Environmental Research Project IV	(1)+
Humanities or Social Science Elective	3
TOTAL	15
GRAND TOTAL	67-68
	or Microbiology General Chemistry II Capstone Soils Capstone Soils Lab Environmental Research Project IV Humanities or Social Science Elective TOTAL

° Course has a prerequisite. Students should check course description.

@ Students must complete ENV\* K220° or other 40-hour HAZ-WOPER training before graduation (() Course is considered a prerequisite for this technology degree.

()+ This course is a Semester IV optional cohort course.

# Environmental Engineering Technology, Associate in Science Degree Program Objectives

Graduates of the program in Environmental Engineering Technology will:

 graduates will be qualified for to make technical and creative contributions to and find employment in environmental monitoring and measurements, policy and design in the practice of environmental engineering technology.
 graduates will have an appreciation for the need to be lifelong learners.

3. graduates will demonstrate professionalism and a sense of societal and ethical responsibility in their professional endeavors.

4. graduates will engage in professional development or study in a four-year program to pursue flexible career paths amid future technological changes.

# Environmental Engineering Technology, Associate in Science Degree Program Outcomes

By the time of graduation, students in the Environmental Engineering Technology program will:

1. practice the skills needed to work effectively in teams and as an individual.

2. demonstrate the ability to use appropriate mathematical, computational and graphic-thinking skills needed for environmental engineering technology applications.

3. combine oral, graphical and written communication skills to present and exchange information effectively and communicate design solutions.

4. know of a professional code of ethics

describe concepts relating to environmental monitoring, policy, processes and continuous improvement.

 describe how the concepts of environmental measurements and the design, management and operation of environmental facilities affect evaluation of analysis, policies and decision making.

6. illustrate an ability to think critically and identify, evaluate and solve complex environmental problems; demonstrate technical and provide practical applications in environmental control problem and solutions; and communicate solutions technically and effectively.

7. recognize actions and acts of professionalism that allow them to become informed and participating citizens cognizant of ethics, civic duty and social responsibility.
8. recognize the need to be lifelong learners.

# Environmental Health and Safety Management Certificate Program

# **Certificate Program**

Program Coordinator: Diba Khan-Bureau - 860-215-9443

Environmental, occupational health and safety is an important factor in all workplaces today. In all workplaces and schools, the law requires environmental management and occupational, health, and safety standards to be met. The certificate will enable students to apply their EH&S management skills in any workplace setting. Having an EH&S management certificate will afford the students the opportunity to obtain work, become promoted at their present workplace, or continue their education. All credits can be applied towards an associate of science degree in environmental or civil engineering technology. Students may complete this certificate by completing the courses that are listed below.

# ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BMG* K202°	Principles of Management	3
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3
ENV* K101	Environmental Studies	3
ENV* K110°	Environmental Regulations	3
ENV* K130°	Occupational Safety and Health	3
ENV* K220	Hazardous Materials	3
ENV* K295°	Environmental Issues Seminar	3
	GRAND TOTAL	24

° Course has a prerequisite. Students should check course description.

# Environmental Health and Safety Management, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. apply environmental, safety and health management skills in workplace settings.

2. implement written workplace procedures in the environmental, health and safety fields.

3. describe concepts of workplace safety and environmental management and be able to understand the roles and responsibilities of the EHS professionals and the decision-making process involved in everyday situations.

4. provide guidance in planning and implementing practices that promote safety and prevent workplace accidents.

5. use communication and interpersonal skills to establish the respect and authority an EHS professional needs to surmount institutional barriers for employee well-being and environmental protection.

6. recognize the limitations of human capabilities in the work-place.

7. identify workplace hazards, find the means to reform unsafe procedures and behaviors, and establish engineering and management controls to reduce hazards.

8. explain product safety requirements of the marketplace and describe engineering and management techniques to meet them.

# Sustainable Landscape Ecology and Conservation Technician Certificate Program

#### **Certificate Program**

Program Coordinator: Diba Khan-Bureau - 860-215-9443

This 24 credit certificate program is designed to provide students with entry-level skills required to fill technician jobs in the areas of sustainable landscape design, planning and conservation. This two-semester certificate consists of courses that will enable students to apply sustainable landscape ecology skills and knowledge in a fast rising "green" and sustainable workforce. As green infrastructure alternatives are increasingly used to manage storm water, improve air guality and reduce the urban heat island affect, jobs in engineering, engineering technology, and research and modeling will be essential in the development, design and performance monitoring of green systems. The certificate in sustainable landscape ecology and conservation will provide students with the options to obtain work or to continue their education to acquire an A.S. or an advanced degree. Sustainable operations and alternative energy are growing more central to the American and global economy. This certificate supports the new paradigm for sustainable living.

This certificate was funded by a USDOL Community-Based Training Grant, as implemented by the Employment and Training Administration.

Students may complete this certificate by completing the courses that are listed below.

# SUSTAINABLE LANDSCAPE ECOLOGY AND CONSERVATION CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ARC* K214	Sustainable Design	3
ENG* K101°	Composition	3
ENV* K101	Environmental Studies	3
ENV* K110°	Environmental Regulations	3
ENV* K146	Introduction to GIS	3
ENV* K207°	Sustainable Landscape Care	3
ENV* K220	Hazardous Materials	3
ENV* K <b>295</b> °	Environmental Issues Seminar	3
	GRAND TOTAL	24

° Course has a prerequisite. Students should check course description.

#### Sustainable Landscape Ecology and Conservation Technician, Certificate Program Outcomes

Upon successful completion of all program requirements graduates will be able to:

1. demonstrate familiarity with key terms, concepts, principles, methods and techniques of sustainable ecological design.

2. apply their knowledge within environmental design settings to solve specific ecological design problems.

3. work and learn in an interdisciplinary environment.

4. apply natural resource problem-solving skills.

continue active, student-directed learning for professional development.

5. practice excellent written and oral communication skills.

# **Exercise Science**

# **Associate in Science**

Program Coordinator: Heidi Zenie - 860-215-9485

This 67 credit program is designed to provide a strong basic foundation in the area of exercise science as well as a broad background in general education. For those students seeking an entry level position in health and fitness, the Exercise Science program prepares students for necessary industry certifications and the knowledge and motivation to continue as life long learners in health and fitness. For students interested in furthering their education by transferring to a four-year institution, the program prepares students to transfer to an exercise science or other health related program.

# **EXERCISE SCIENCE CURRICULUM**

Course ID	Title of Course	Credits
SEMESTER I		
ENG* K101°	Composition	3
HPE* K105°	Introduction to Fitness and Training	3
HPE* K232°	First Aid and Sports Injury	2
MAT* K186°	Precalculus	4
<b>PSY</b> * K111°	General Psychology I	3
	TOTAL	15
SEMESTER II		
BIO* K121°	General Biology	4
CHE* K111°	Concepts of Chemistry	4
HPE* K130	Weight Training and Fitness	3
ENG* K102°	Literature and Composition	3
RLS* K101°	Introduction to Recreation and Leisure Service	
or	or	3
PSY* K244°	Sports Psychology	
	TOTAL	17
SEMESTER III		
BIO* K111°	Introduction to Nutrition	3
BIO* K211°	Anatomy and Physiology I	4
COM* K173°	Public Speaking	3
HPE* K241°	Exercise Physiology with Lab	4
HPE* K245°	Program and Prescription I	4
	TOTĂL	18
SEMESTER IV		
BIO* K212°	Anatomy and Physiology II	4
CSA* K105	Introduction to Software Applications	3
HPE* K243°	Kinesiology with Lab	4
HPE* K246°	Programming and Prescription II	3
	Fine Arts Elective	3
	TOTAL	17
	GRAND TOTAL	67
° Course has a pr	erequisite. Students should check cour	se

description

# Exercise Science, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. plan, administer, and evaluate wellness and fitness programs, nutrition projects, and exercise physiology in clinical, industrial and corporate environments.

2. describe and apply principles of leadership, including motivating, leading and directing.

3. develop a medically-based fitness model.

4. understand the terminology in medicine, health promotion and fitness.

5. gain an understanding of how to design exercise programs for special populations

6. understand how to establish exercise programs/prescriptions, exercise related goals and objectives, training modifications and program evaluation strategies.

7. collaborate with a variety of health care professionals through consultations and referrals in a multi-disciplinary approach to wellness.

8. think critically to effectively solve problems in a variety of dynamic environments.

9. effectively communicate with health career providers, fitness professionals, clients, administrators, family and community in the delivery of life long health and wellness.

10. Additionally, the graduate will complete the comprehensive learning outcomes identified within the General Education Component.

# **Finance and Banking**

# **Associate in Science**

Program Coordinator: Edwin Muenzner- 860-215-9456

This 62-63 credit curriculum is for students intending on entering the workforce and pursuing a business career immediately after graduating. This curriculum places greater specialization on Business Specialization courses and less on General Education. The goal is for graduates to be sufficiently competent to perform in the business world within their chosen career field immediately upon graduation.

# FINANCE AND BANKING CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
MAT* K123°	Elementary Statistics	3
	TOTAL	16
SEMESTER II	10 ML	10
BBG* K210°	Business Communication	3
BMG* K202°	Principles of Management	3
COM* K173°	Public Speaking	3
ECN* K101°	Principles of Macroeconomics	3
	Fine Arts Elective	3
	TOTAL	15
SEMESTER III		
ACC* K118°	Managerial Accounting	4
BBG* K231°	Business Law I	3
BFN* K110°	Personal Finance	3
BMK* K201°	Principles of Marketing	3
ECN* K102°	Principles of Microeconomics	3
	TOTAL	16
SEMESTER IV		
ACC* K292°	Accounting Practicum	
or	or	3
	Elective from one of the following prefix	es; ACC*,
	BBG*, BES*, BFN*, BMG*, BMK*, HSP*.	
BBG* K232°	Business Law II	3
BFN* K201°	Principles of Finance	3
ECN* K250°	Money and Banking	3
	Natural Sciences Elective	3-4
	TOTAL	15-16
	GRAND TOTAL	62-63

° Course has a prerequisite. Students should check course description.

#### Finance and Banking, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

 demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Finance and Banking.
 demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Finance and Banking.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary. have obtained a well rounded general education.

4. be prepared for employment in the field of finance and banking.



# **Fire Technology and Administration**

# The Associate in Science

Program Coordinator: Adam Kerop- 860-625-0179

The Fire Technology and Administration program is designed to provide advanced training and education on the college level that develops competent technicians who are, or will become, leaders in fire protection, prevention and administration. It also provides training and education for personnel of insurance companies and other industries involved in fire prevention and protection practices.

Working in career and volunteer fire departments, in local, state and federal government agencies, in industry, in architectural and construction firms, insurance organizations, and in related groups, the fire technologist knows the need for fire prevention activities, the necessity to educate both children and adults in fire safety, and the importance of enforcing fire prevention codes.

The program of study, which leads to the Associate in Science Degree in Fire Technology and Administration, is planned to help students meet the professional standards established by the National Fire Protection Association, the Connecticut Commission on Fire Prevention and Control, and the Connecticut Fire Marshal's Training Council.

# FIRE TECHNOLOGY AND ADMINISTRATION CURRICULUM

Course ID SEMESTER I	Title of Course	Credits
ENG* K101°	Composition	3
FTA* K112	Introduction to Fire Technology	3
PHY* K114°	Mechanics	4
	TOTAL	10
SEMESTER II	10 ML	10
COM* K173°	Public Speaking	3
ENG* K202°	Technical Writing	
FTA* K116°	Building Construction	3 3
MAT* K167°	Principles of Statistics	
or	or	3-4
MAT* K186°	Precalculus	
PHY* K115°	Heat Sound Light	4
	Technical Elective	3
	TOTAL	19-20
SEMESTER III		
CHE* K111°	Concepts of Chemistry	4
FTA* K118°	Fire Prevention and Inspection	3
FTA* K210°	Water Supply and Hydraulics	3
FTA* K213	Codes and Standards	3
	Humanities/Social Science Elective	3
	Technical Elective	3
	TOTAL	19

SEMESTER IV		
FTA* K125°	Chemistry for Emergency Responders	3
FTA* K216°	Municipal Fire Administration	3
FTA* K218°	Sprinklers and Fixed Extinguishing Systems	3
FTA* K219°	Fire Investigation	3
	Humanities/Social Sciences Elective	3
	Open Elective #	3
	TOTAL	18
	GRAND TOTAL	66-67

° Course has a prerequisite. Students should check course description.

# Elective credits may be granted for Connecticut certification as an Emergency Medical Technician, Fire Fighter III, Fire Instructor II and Fire Marshal/Fire Inspector and for some National Fire Academy courses. Appropriate transfer credits may also be accepted from other accredited colleges.

# Fire Technology and Administration, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. apply appropriate principles of fire technology and administration in a variety of situations.

2. analyze fire technology problems and solve them logically and holistically.

3. demonstrate proficiency in computer use in fire service. 4. communicate effectively with municipal officials.

5. demonstrate empathy regarding the crisis nature of fire technology

6. demonstrate respect for diversity in the workplace

7. explain the importance of physical wellness and its relationship to effective fire technology.

8. demonstrate sound ethical, philosophical and moral professional characteristics.

9. adopt a commitment to professional growth by attending meeting, seminars and continuing education programs.

10. Additionally, the graduate will complete the comprehensive learning outcomes identified within the General Education Component.

# General Engineering Technology

# The Associate in Applied Science

Program Contact: Patrick Knowles- 860-215-9445

The General Engineering Technology (GET) program was developed to meet the industry's need for generalists as opposed to technicians educated in a specific discipline. It also provides a program for students who wish to design an engineering technology curriculum to meet their own individual needs, and for students who are unsure of the specific technology discipline they want as a major.

Each student takes a core of courses in mathematics, science, technology, humanities and social sciences. The remainder of the program consists of courses chosen by the student to best meet personal goals. For example, an elective concentration in optics can provide the background for an entry-level position in Connecticut's photonics industry. Approved military coursework may also be used to fulfill the elective requirements.

GET students are currently employed by Electric Boat, Pratt and Whitney, Connecticut Municipal Electrical Energy Coop, the US Navy, and other southeastern Connecticut industries. Students have also successfully transferred to four-year institutions in Engineering Technology such as Central Connecticut State University School of Technology. Students considering transfer are advised to see their advisor early in their studies to maximize transfer credit.

#### **GENERAL ENGINEERING TECHNOLOGY CURRICULUM** (suggested 2 year sequence)

Course ID SEMESTER I	Title of Course	Credits
CHE* K111°	Concepts of Chemistry	4
CSA* K105	Introduction to Software Applications	3
ENG* K101°	Composition	
MAT* K172°	College Algebra	3
MFG* K102	Manufacturing Processes	3 3 3
MFG* K103	Manufacturing Processes Lab	1
TCN* K105	Laser and Lab Safety	1
	TOTAL	18
SEMESTER II		
COM* K173°	Public Speaking	3
ENG* K202°	Technical Writing	3
MAT* K186°	Precalculus	4
MEC* K150°	Solid Modeling I	1
MEC* K151°	Solid Modeling I Lab	2
PHY* K114°	Mechanics	4
	TOTAL	17
SEMESTER III		
MEC* K154°	Solid Modeling II	1
MEC* K155°	Solid Modeling II Lab	2
PHY* K115°	Heat Sound Light	4
	Humanities/Social Science Elective	3
	Open Elective	3
	Technical Elective	3
	Technical Elective Lab	1
	TOTAL	17

# SEMESTER IV FFT\* K105° +

EET* K105° +	Electric Circuits and Systems	3
EET* K106° +	ElectricCircuits and Systems Lab +	1
	Humanities/Social Sciences Elective	3
	Open Elective	3
	Technical Elective	3
	Technical Elective	3
	TOTAL	16
	GRAND TOTAL	68

° Course has a prerequisite. Students should check course description.

ELECTIVES FOR OPTION IN PHOTONICS (OPTICS):

PHO* K101°	Introduction to Light and Lasers	4
PHO* K241/242°	Introduction to Laser Technology and Lab	4
MFG* K118/119°	Computer Controlled Laser Material Processing	
	and Lab	4
TCN* K291°	Interdisciplinary Capstone Design Project	
or	or	3
PHO* K295°	Photonics Co-Op	

# General Engineering Technology, Associate in Science **Degree Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. prepare technical and laboratory reports and present them using the latest computer software and oral presentation skills. 2. prepare drawings of machine components both manually and using Autocad software

3. explain orthographic projection as it relates to standard board drafting and CAD

4. explain various parts of a drill press, milling machine, and lathe and accomplish the calculations necessary to determine the correct rotational speed for the engine lathe, drill press and milling machine

5. explain basic Chemistry concepts such as measurements in chemistry, atomic structures and chemical bonding, chemical reactions, states of matter and stoichiometry.

6. demonstrate skills in a discipline of choice including but not limited to, Optics, Mechanical, Manufacturing, Electrical, Civil, CAD or Environmental Engineering Technology options.

7. explain an option in general engineering technology that they have chosen to emphasize in their studies.

# **General Studies**

# The Associate in Science

Program Leader: Peter Patsouris- 860-215-9462

The General Studies Associate in Science degree program is designed primarily for those individuals whose special interests cannot be accommodated within a Liberal Arts degree program or for those who wish to develop a broader base of knowledge for intellectual stimulation and personal growth. With more open electives and fewer required courses than the Liberal Arts and Sciences degree, the General Studies degree offers greater flexibility for individual interest and needs. This program can also be suitable for transfer to a four-year institution, but more care and guidance in choosing electives will be necessary. Students interested in using the General Studies degree for transfer are advised to check carefully the specific requirements of the institution to which they intend to transfer. With the assistance of an academic advisor, the student may create a program of study suitable either as a foundation to transfer to a four-year college or as preparation for particular self-defined goals.

# GENERAL STUDIES CURRICULUM

Course ID	Title of Course	Credits
ENG* K101°	Composition	3
ENG* K102°	Literature and Composition	3
COM* K173°	Public Speaking	
or+	or+	1-3+
COM* K109	Speech Practice	
IDS K105 \$	First Year Experience or First Year Experience Equival	ent \$ <b>3</b>
MAT* K135°	Topics in Contemporary Math	
or	or	3
Higher MAT		

Arts Elective (Any course in art, graphic arts, theater, creative writing, ANT\* K136/MUS\* K104 Music Cultures of the World, or ARC\* K102 Architecture of the World)

Social Sciences Electives: (One course must be history. The other two may be chosen from: anthropology, economics, geography, history, international studies, political science, psychology, sociology, social sciences, the following courses: CJS\* K101, K102, K121, K201, K202, K210, K211, K213, K217, K242, K250, K253, K294; ECE K182, K215; all human services courses except HSE\* K281 Practicum). HIS\* 3

HIS*	

Natural Sciences Elective: (Courses in astronomy, biology, chemistry, earth science, ecology, ENV\* K101 Environmental Studies, geology, marine science, nutrition, oceanography, physics, and SCI\* K250 Process and Inquiry of Natural Science. Does NOT include HLT\* K155 Personal Health).

Advanced Liberal Arts and Sciences Electives: (Any 200 course in art, foreign languages, graphic arts, literature, philosophy, COM\* K291, COM\* K292, theater, creative writing, natural sciences, social sciences (except HIS\* K201 and HIS\* K202), math, CJS\* K201, K202, K210, K211, K213, K217, K242, K250, K253, K294; ECE\* K215, LAS\* K250).

Open Electives Open electives should be chosen in consultation with an advisor with

3 3

no more than 15 hours selected from any one subject area.

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	GRAND TOTAL	60-61

° Course has a prerequisite. Students should check course description.

+ It is important to note that no fewer than 61 credits are needed to complete the degree. If the one credit speech option is selected, students must be careful to take two fourcredit courses somewhere in the program or take an extra course.

Students who are planning on transferring to a four-year institution should check with their advisors, their future schools, or refer to the Selecting Electives list regarding General Education Requirements.

\$ \$ First Year Experience course equivalents are Perspectives in Criminal Justice (CJS\* K100) and Perspectives in Nursing (NUR\* K108).

# **OTHER REQUIREMENTS:**

In selecting courses, each student must fulfill the following requirements:

# International/Intercultural Requirement

All degree-seeking students must complete one course which emphasizes a global, cross-cultural or multi-cultural perspective and encourages students to think beyond the boundaries of traditional Western European cultural perspectives.

# Courses which satisfy this requirement are:

ANT* K105	Intro to Cultural Anthropology
ANT* K136/	
MUS* K104	Music Cultures of the World
ANT* K230	Indigenous Peoples of the World
ARC* K102	Architecture of the World
BIO* K180/	
ENV* K101	Principles of Environmental Science/
	Environmental Studies
CJS* K198	Special Topics: Intro to Terrorism and
	Homeland Security
COM* K202	Intercultural Communication
ENG* K240	Studies in World Literature
ENG* K250	Studies in Ethnic Literature
ENG* K261	Women Writers Across Cultures
ENV* K101/	
BIO* K180	Environmental Studies/Principles of
	Environmental Science
GEO* K111	World Regional Geography
HIS* K121	World Civilization I
HIS* K122	World Civilization II
HIS* K218	African American History
HIS* K244	Europe in the 20th Century

3 3

3-4

HIS* K257	War & Society in World Civilizations
HIS* K271	Modern Asia
MUS* K104/	
ANT* K136	Music Cultures of the World
PHL* K151	World Religions
POL* K103	Intro to International Relations
SOC* K103	Social Problems
SOC* K220	Racial and Ethnic Diversity
SPA* K111	Elementary Spanish I
SPA* K112	Elementary Spanish II
SPA* K211	Intermediate Spanish I
SPA* K212	Intermediate Spanish II
SSC* K210	World Issues

#### **Oral Communication Requirement**

All degree-seeking students must complete one course to develop competency in oral communication; the courses which meet this requirement are:

COM\* K109 Speech Practice 1 credit

COM\* K173 Public Speaking 3 credits

These requirements do not increase the total number of credits needed to complete the degree; they can be met within the 60-61 credits of the degree program by choosing appropriate electives.

# General Studies, Associate Degree Program Outcomes and Statement of Core Values

Three Rivers Community College is committed to the belief that the best preparation for life, and especially for careers that require specialized training, is a broad acquaintance with human knowledge. The General Studies degree program is designed to give students the opportunity to explore knowledge from multiple perspectives. Students are challenged to become intellectually curious, aesthetically aware and critically perceptive, and to develop their communicative and quantitative skills. Through the study of the natural sciences, the social sciences, and the humanities, the General Studies degree program gives students the flexibility to adapt to the changing needs of the workplace and the foundation necessary for lifelong learning and personal growth.

Students completing the general Studies program will develop the ability to:

- think critically and creatively
- work collaboratively as well as independently
- communicate effectively both in speaking and in writing
- reason quantitatively as well as verbally
- value artistic expression

• move beyond a narrow focus and recognize broader historical, cultural, global and scientific perspectives.

• understand and reflect searchingly upon one's values and the values of others.

General education and career education are interactive components. They enrich each other by helping students to make career choices in keeping with their understanding of themselves and their world. Together, they provide the skills and perspectives that make possible the dignity of work and social contribution. They cultivate a framework of meaning, value, ethical purpose and commitment that enrich every aspect of life. They foster an attitude of critical inquiry, curiosity, openness and wonder that enables a spirit of lifelong learning.

# **General Studies Certificate Program**

# **Certificate Program**

Program Leader: Academic Dean - 860-215-9004

This certificate program provides the opportunity for students who have not decided on a specific academic or professional/technical goal to explore the broadest range of courses offered at Three Rivers Community College. Students tailor the certificate program to meet their individual needs and interests. Students may complete this certificate by completing the courses that are listed below.

# **GENERAL STUDIES CERTIFICATE CURRICULUM**

Course ID	Title of Course	Credits
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
	Math/Science elective	3-4
	Social Science elective	3
	Humanities/Speech elective	3

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#### **GRAND TOTAL**

30-32

° Course has a prerequisite. Students should check course description.

#### **General Studies, Certificate Program Outcomes**

Upon successful completion of all program requirements graduates will be able to:

- 1. think critically, analytically and creatively.
- 2. communicate effectively in writing.

3. move beyond a narrow focus and recognize broader perspectives.

4. better understand the relationship between one's own self, others, and society in which we live.

Hospitality

# Hospitality Management: Casino Management Option

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356 **Associate in Science** 

Program Coordinator: Peter Edmondson - 860-215-9425

The Hospitality Management program prepares students for career opportunities in the growing hospitality industry in Southeastern Connecticut. Students completing the Hospitality Management degree program are well prepared for a wide variety of management-level positions in the hospitality industry. In addition, students are able to successfully transfer credits to obtain higher degrees at other colleges and universities.

# CASINO MANAGMENT OPTION CURRICULUM

Course ID	Title of Course	Credits	
General Education	General Education Requirements		
ECN* K101°	Principles of Macroeconomics	3	
ENG* K101°	Composition	3	
COM* K173°	Public Speaking	3	
MAT* K123°	Elementary Statistics	3	
IDS K105	First Year Experience	3 3 3	
	Fine Arts Elective	3	
	Natural Sciences Elective	3-4	
Business Core Red	quirements		
ACC* K111°	Principles of Accounting I	4	
BBG* K115°	Business Software Applications	3	
BBG* K231°	Business Law I	3	
BMG* K202°	Principles of Management	3 3	
BMK* K201°	Principles of Marketing	3	
Business Specializ	cation Requirements		
BBG* K210°	Business Communication	3	
	Business Elective		
or	or	3	
HSP* K296°	Cooperative Education		
HSP* K100	Introduction to the Hospitality Industry	3	
HSP* K108	Sanitation and Safety	3	
HSP* K111°	Basic Food Preparation	4	
HSP* K117	Beverage Management	3	
HSP* K134	Hospitality Customer Relations	3	
HSP* K152°	Introduction to Casino Management	4	
	GRAND TOTAL	63-64	

°Course has a prerequisite. Students should check course description.

# Hospitality Management, Casino Management Option, Associate in Science Degree Program Outcomes

Upon successful completion of any Hospitality Management Associate in Science degree program, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Hospitality Manage ment.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field

of Hospitality Management.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

4. have obtained a well rounded general education.

5. be prepared for employment in the field of Hospitality Management.

# **Casino Management Certificate Program**

# **Certificate Program**

Program Coordinator: Peter Edmondson - 860-215-9425 Students may complete this certificate by completing the course that are listed below.

# CASINO MANAGEMENT CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ENG* K101°	Composition	3
HSP* K100	Introduction to the Hospitality Industry	3
HSP* K108	Sanitation and Safety	3
HSP* K111°	Basic Food Preparation	4
HSP* K117	Beverage Management	3
HSP* K134	Hospitality Customer Relations	3
HSP* K152°	Introduction to Casino Management	4
HSP* K296°	Cooperative Education	3
MAT* K123°	Elementary Statistics	3
	GRAND TOTAL	29
° Course has a prerequisite. Students should check course		
description.		

IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A

PARTICULAR FIELD OF STUDY

# **Hotel Management Option**

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356

Associate in Science

Program Coordinator: Peter Edmondson - 860-215-9425

The Hospitality Management program prepares students for career opportunities in the growing hospitality industry in Southeastern Connecticut. Students completing the Hospitality Management degree are well prepared for a wide variety of management-level positions in the hospitality industry. In addition, students are able to successfully transfer credits to obtain higher degrees at other colleges and universities.

#### HOTEL MANAGMENT OPTION CURRICULUM

Course ID	Title of Course	Credits
General Education R	lequirements	
ECN* K101°	Principles of Macroeconomics	3
ENG* K101°	Composition	
COM* K173°	Public Speaking	3
IDS K105	First Year Experience	3
MAT* K123°	Elementary Statistics	3 3 3 3 3
	Fine Arts Élective	3
	Natural Sciences Elective	3-4
Business Core Requi	rements	
ACC* K111° .	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3
BBG* K231°	Business Law I	3
BMG* K202°	Principles of Management	3 3 3
BMK* K201°	Principles of Marketing	3
Business Specialization Requirements		
BBG* K210°	Business Communication	3
	Business Elective	
or	or	3
HSP* K296°	Cooperative Education	
HSP* K100	Introduction to the Hospitality Industry	3
HSP* K108	Sanitation and Safety	3
HSP* K111°	Basic Food Preparation	4
HSP* K117	Beverage Management	3
HSP* K134	Hospitality Customer Relations	3
HSP* K245°	Hospitality Sales and Marketing	4
	GRAND TOTAL	63-64

° Course has a prerequisite. Students should check course description.

# Hospitality Management, Hotel Management Option, Associate in Science Degree Program Outcomes

Upon successful completion of any Hospitality Management Associate in Science degree program, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Hospitality Management.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Hospitality Management.

3. demonstrate the ability to apply learned principles and skills

to unique factual settings using correct vocabulary. 4. have obtained a well rounded general education. 5. be prepared for employment in the field of Hospitality Management.

# **Hotel Management Certificate Program**

#### **Certificate Program**

Program Coordinator: Peter Edmondson - 860-215-9425 Students may complete this certificate by completing the courses that are listed below.

# HOTEL MANAGMENT CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ENG* K101°	Composition	3
HSP* K100	Introduction to the Hospitality Industry	3
HSP* K108	Sanitation and Safety	3
HSP* K111°	Basic Food Preparation	4
HSP* K134	Hospitality Customer Relations	3
HSP* K245°	Hospitality Sales and Marketing	4
HSP* K296°	Cooperative Education	3
MAT* K123°	Elementary Statistics	3
	GRAND TOTAL	26
° Course has a prerequisite. Students should check course		
1 1 1		

description.

Hospitality

# Communication and Customer Relations Certificate Program

# **Certificate Program**

Program Coordinator: Peter Edmondson - 860-215-9425

Students may complete this certificate by completing the course that are listed below.

# COMMUNICATION AND CUSTOMER RELATIONS CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BMK* K201°	Principles of Marketing	
or	or	3-4
HSP* K245°	Hospitality Sales and Marketing	
ENG* K101°	Composition	3
COM* K173°	Public Speaking	3
HSP* K100	Introduction to the Hospitality Industry	3
HSP* K134	Hospitality Customer Relations	3
	GRAND TOTAL	15-16

° Course has a prerequisite. Students should check course description.

# Hospitality Management: Restaurant Management Option

#### Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356 Associate in Science

Program Coordinator: Peter Edmondson - 860-215-9425

The Hospitality Management program prepares students for career opportunities in the growing hospitality industry in Southeastern Connecticut. Students completing the Hospitality Management degree program are well prepared for a wide variety of management-level positions in the hospitality industry. In addition, students are able to successfully transfer credits to obtain higher degrees at other colleges and universities.

# **RESTAURANT MANAGMENT OPTION CURRICULUM**

Course ID	Title of Course	Credits	
General Education	Requirements		
ECN* K101°	Principles of Macroeconomics	3	
ENG* K101°	Composition	3	
COM* K173°	Public Speaking	3	
IDS K105	First Year Experience	3	
MAT* K123°	Elementary Statistics	3	
	Fine Arts Elective	3	
	Natural Sciences Elective with lab	3-4	
Business Core Requirements			
ACC* K111°	Principles of Accounting I	4	
BBG* K115°	Business Software Applications	3	
BBG* K231°	Business Law I	3	
BMG* K202°	Principles of Management	3	

BMK* K201°	Principles of Marketing	3
Business Specializ	zation Requirements	
BBG* K210°	Business Communication	3
	Business Elective	
or	or	3
HSP* K296°	Cooperative Education	
HSP* K100	Introduction to the Hospitality Industry	3
HSP* K108	Sanitation and Safety	3
HSP* K111°	Basic Food Preparation	4
HSP* K112°	Advanced Food Preparation	4
HSP* K117	Beverage Management	3
HSP* K134	Hospitality Customer Relations	3
	GRAND TÓTAL	63-64

° Course has a prerequisite. Students should check course description.

#### Hospitality Management, Restaurant Management Option, Associate in Science Degree Program Outcomes

Upon successful completion of any Hospitality Management Associate in Science degree program, graduates will be able to: 1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Hospitality Management.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Hospitality Management.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

 have obtained a well rounded general education.
 be prepared for employment in the field of Hospitality Management.

# Restaurant Management Certificate Program

# **Certificate Program**

Program Coordinator: Peter Edmondson - 860-215-9425

Students may complete this certificate by completing the courses that are listed below.

# **RESTAURANT MANAGMENT CERTIFICATE CURRICULUM**

Course ID	Title of Course	Credits	
ENG* K101°	Composition	3	
HSP* K100	Introduction to the Hospitality Industry	3	
HSP* K108	Sanitation and Safety	3	
HSP* K111°	Basic Food Preparation	4	
HSP* K112°	Advanced Food Preparation	4	
HSP* K117	Beverage Management	3	
HSP* K134	Hospitality Customer Relations	3	
HSP* K296°	Cooperative Education	3	
MAT* K123°	Elementary Statistics	3	
	GRAND TOTAL	29	
° Course has a prerequisite. Students should check course			

description.

# IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

FOR COMPLETE AND UP-TO-DATE ACADEMIC INFORMATION, VISIT WWW.THREERIVERS.EDU

# **Human Services**

# **Associate in Science**

Program Coordinator: Joyce Martin - 860-215-9451

The Human Services Associate of Science program responds both to the need to prepare students for entry-level positions in human services, and to prepare students who plan to transfer to a four-year college or university for a baccalaureate degree in social work (BSW) or some other related field of study. The curriculum is designed to help students acquire knowledge, skills and competency in the methods of casework, group work, case management and community organization, with a focus on individuals, families, small groups, organizations and communities.

# Note to students who plan to continue their education beyond the associate degree:

Students who intend to transfer are urged to investigate and select the institution to which they will transfer as early as possible since each transfer situation must be planned to meet specific baccalaureate requirements.

In general, the following choices will satisfy more of the requirements of the baccalaureate granting institutions: 1) completing BIO\* K121 with lab or BIO\* K115 with lab instead of HLT\* K155.

2) completing MAT\* K137 or higher.

3) completing two semesters of Spanish or French instead of Human Services electives or Sign Language.

4) completing ANT\* K105 (Introduction to Cultural Anthropology) as satisfaction of one of the open elective requirements.

# HUMAN SERVICES CURRICULUM

Course ID CSA* K105° ENG* K101° ENG* K102° Please select one of	Title of Course Introduction to Software Applications Composition Literature and Composition the following three courses:	Credits 3 3 3 3-4
HLT* K155°	Personal Health	
or BIO* K115	or Human Biology	
or	or late t	
BIO* K121°	General Biology I	•
HSE* K101°	Introduction to Human Services	3
HSE* K210°	Group and Interpersonal Relations	3
HSE* K241°	Human Services Agencies and Organizations	3
HSE* K251°	Work with Individuals and Families	3
HSE* K281° ++	Human Services Fieldwork I	3
IDS K105	First Year Experience	3
MAT* K135°+++	Topics in Contemporary Math or higher	3
POL* K111°	American Government	3
PSY* K111°	General Psychology I	3
PSY* K201°	Life Span Development	3
SOC* K101°	Principles of Sociology	3
SOC* K103°	Social Problems	3

Human Services Elective or Foreign Language or Sign Language: (In addition to human services courses, other courses in social sciences will satisfy the requirement if they are approved by the Program Coordinator of the Human Services Program) 6-8

	Fine Arts Elective (Any art, music, theater, writing; also ARC* K102 Architecture	creative
	of the World)	3
Open Electives +++		3
	GRAND TOTAL	60-63

° Course has a prerequisite. Students should check course description.

+++ Practicum - Requires the consent of instructor. +++ See program coordinator for recommendations

# Human Services, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. explain fundamental concepts of human services, especially case management, group work, community organization and supervision

2. explain the ethical principles and values governing the human service/social work profession.

3. explain the historical, social and political context within which the human services and social welfare services operate plan effective interventions with vulnerable population groups.

4. identify and index community resources.

5. integrate knowledge and abilities in a field placement situation.

6. identify entry level career opportunities in social service settings.

7. plan for career advancement and further educations.



# **Case Management Certificate Program**

# **Certificate Program**

Program Coordinator: Joyce Martin- 860-215-9451

This 27 credit program is designed to prepare students for entry-level case management positions in social service agencies. Students already employed in social service organizations performing case management will acquire specific skills that will improve their career advancement opportunities. Students will learn how to apply the standard functions performed in case management (outreach, referral, intake, assessment, goal-setting, intervention planning, resource identification, interagency coordination, supportive counseling and therapy referral, advocacy, linking clients to formal agencies and informal social support systems, monitoring, reassessment and outcome evaluation discharge). This program curriculum will help students to conduct inperson assessments in order to develop individual treatment plans for effective interventions with vulnerable populations. Students will focus on the comprehensive identification and indexing of community resources. They will be able to apply the case management model in various areas of direct practice, e.g., child welfare, gerontology, substance abuse, mental health, housing and income maintenance. Students may completed this certificate by completing the courses that are listed below.

#### CASE MANAGMENT CERTIFICATE CURRICULUM

Course ID	Title of Course	Credit
CSA* K105	Introduction to Software Applications	3
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	
or	or	3
COM* K173°	Public Speaking	
HLT* K155°	Personal Health	3
HSE* K101°	Introduction to Human Services	3
HSE* K105°	Core Competencies in Community Health Work	3
HSE* K241°	Human Services Agencies and Organizations	3
HSE* K251°	Work with Individuals and Families	3
HSE* K281°	Human Services Fieldwork I	3
	GRAND TOTAL	27
° Course has a pro	produisite Students should check cours	0

° Course has a prerequisite. Students should check course description.

#### **Case Management, Certificate Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate understanding of theories underlying social service practice.

2. demonstrate understanding of the case management method with vulnerable population groups.

3. demonstrate developmental, problem-solving, and coping capabilities of client-centered practice methods.

4. demonstrate ability to assess, plan for intervention, monitor, and evaluate outcomes in the case management method.

# **Laser and Fiber Optic Technology**

# **Associate in Science**

Program Coordinator: Judith Donnelly - 860-215-9423

The Laser and Fiber Optic Technology program was created to meet the critical need for laser electro-optic technicians in Connecticut, which has the third highest concentration of laser and fiber optic firms in the nation.

The program has a solid core of electronics courses, including electric circuits, solid state electronics, digital circuits and electronic communications. Proficiency in laser optics is gained through courses in geometric and wave optics, laser and fiber optics.

In addition to the major specialty courses, students also study mathematics, English, communications and the humanities.

Students who complete the program have the opportunity to transfer to baccalaureate programs in applied physics or engineering technology, or to find immediate employment in the burgeoning laser and fiber optics field.

# LASER AND FIBER OPTIC TECHNOLOGY CURRICULUM

(suggested 2 year sequence)

Course ID SEMESTER I	Title of Course	Credits
CAD*	Computer-Aided Drafting Elective	3
EET* K105°	Electric Circuits and Systems	3
EET* K106°	Electric Circuits and Systems Lab	1
ENG* K101°	Composition	3
MAT* K172°	College Algebra	3
PHO* K101	Introduction to Light and Lasers	4
	TOTAL	17
SEMESTER II		
EET* K119°	Advanced Electrical Circuits and Systems	3
EET* K120°	Advanced Electric Circuits and Systems Lab	1
MAT* K186°	Precalculus	4
PHO* K241/K242°	Introduction to Laser Technology with Lab	4
PHY* K114°	Mechanics	4
	TOTAL	16
SEMESTER III		
ENG* K202°	Technical Writing	3
EET* K264/265°	Data Aquisition and Control with Lab	4
MAT* K167°	Principles of Statistics	3
PHO* K102°	Applied Optics	4
PHO* K140°	Optolelectronics	4
	TOTAL	18
SEMESTER IV		
PHO* K230°	Laser Electronics	4
PHO* K251/K252°	Fiber Optics Systems and Devices with Lab	4
TCN* K291°	Interdisciplinary Capstone Design Project	3
	Humanities Elective	3
	Social Science Elective	3
	TOTAL	17
	GRAND TOTAL	68

° Course has a prerequisite. Students should check course description. +() This course is considered a prerequisite to the program

and must be taken before PHO\* K102

# Laser and Fiber Optic Technology, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. use general electronic and optical test instrumentation as well as specialized instrumentation such as optical spectrum analyzers and laser beam analyzers.

2. specify, mount, and align optical components and install, align, and operate support and positioning equipment. demonstrate proper optical fiber handling techniques, including connectorization, splicing and the use of optical sources, meters and OTDR.

 survey a laser work area, citing unsafe conditions present.
 work cooperatively with team members to gather and analyze data using applicable software and report results in both oral and written format.

5. read and interpret vendor catalogs and instruction manuals.



# Laser and Fiber Optic Technology Certificate Program

# **Certificate Program**

Program Coordinator: Judith Donnelly - 860-215-9423

This Laser and Fiber Optic Technology Certificate is designed for mechanical, manufacturing, and electronic technicians and engineers who require knowledge of optics/photonics principles for current or future employment. Some of the courses may be delivered by distance learning over the Internet. The courses in the certificate and may be used to fulfill electives in the A.A.S. in General Engineering Technology. The prerequisite for this certificate is a placement score into ENG\* K101, completion of ENG\* K096 with "C#" or better, or an earned associate degree or higher.

Students may complete this certificate by completing the courses that are listed below.

English Competency Requirement met by

# LASER AND FIBER OPTIC TECHNOLOGY CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
MFG* K102/103°	Manufaturing Process and Lab	4
MFG* K118/K119°	Computer-Controlled Laser Materials Processing and La	b 4
PHO* K101	Introduction to Light and Lasers	3
PHO* K241/K242°	Introduction to Laser Technology and Lab	4
TCN* K105	Laser and Lab Safety	1
	GRAND TOTAL	16

° Course has a prerequisite. Students should check course description.

The English Competency Requirement is met by placement into ENG\* K101, or transfer credit, or completion of ENG\* K096 with a "C#" grade or better.

#### Laser and Fiber Optic Technology, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. specify and operate optical test instrumentation, for example, optical spectrum analyzers and laser beam profilers. 2. align, maintain and operate optical components and support and positioning equipment.

3. survey a laser work area, citing unsafe conditions present. read and interpret vendor catalogs and instruction manuals.

# IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A

PARTICULAR FIELD OF STUDY

# **Liberal Arts and Sciences**

# **Associate in Arts**

Program Leader: Peter Patsouris- 860-215-9462

The Liberal Arts and Sciences Associate in Arts degree program is designed primarily for students who plan to transfer to a four-year college or university to continue studies toward a baccalaureate degree in the liberal arts and sciences. It is also suitable for students who wish to engage in an educationally challenging experience for personal growth and intellectual development. The requirements and distribution of courses in this A.A. degree program are similar to the general education requirements in many Liberal Arts and Sciences baccalaureate degree programs. However, since there are variations in the requirements at different four-year institutions, students are advised to check carefully the specific requirements of the institution to which they intend to transfer.

There are specific pathways within the Liberal Arts and Sciences degree program to help students use this degree as a first step toward a long term goal, such as transferring to Eastern Connecticut State University, transferring to the University of Connecticut, or pursuing selected majors. Your academic advisor will have the details you need. You may also secure a copy of the Pathway Guides for transfer to specific programs and universities at the Student Development Office. Call (860)-383-5217 for information.

Specific information on courses which meet elective requirements is also available from Student Services advisors and academic advisors.

# LIBERAL ARTS AND SCIENCES CURRICULUM

Course ID	Title of Course	Credits
ENG* K101°	Composition	3
ENG* K102°	Literature and Composition	3
COM* K173° +	Public Speaking	
or+	or	1-3+
COM* K109+	Speech Practice	
IDS K105 \$	First Year Experience or First Year Experience equivale	nt \$ <b>3</b>
MAT* K146°	Math for the Liberal Arts	
or	or	3
Higher MAT		

Arts Elective (ART\* K101, ART\* K102, MUS\* K101, MUS\* K104/ANT\* K136 or THR\* K101) 3

Foreign Language Electives: (Two semesters of the same foreign language are required. Only Liberal Arts and Sciences electives may be substituted if two years of the same language with a grade of "C" or higher were completed at the high school level. High school transcript and college verification required for substitution. Students who plan on transferring should verify foreign language requirements at the transfer institution).

	 _ 3-4
	3-4
History Elective	_
HIS*	_ 3

(Please choose one of the following HIS\*K121, K122, K201 or K202) Social Sciences Electives: (Please chose from: anthropology, economics, geography, history, political science, psychology, sociology). Natural Sciences Electives: (Courses may be chosen from biology (except nutrition), chemistry, earth science, physics, physical science, SCI\* K250; one course must include a lab).

3-4 4

3

3

Liberal Arts and Sciences Electives: (Courses may be chosen from anthropology, biology, chemistry, earth science, economics, foreign languages, geography, history, literature, math (higher than MAT\* K146), philosophy, physical science, SCI\* K250, physics, political science, psychology, sociology, ART\* K101, ART\* K102, MUS\* K101, MUS\* K104, THR\* K101, WMS\* K105).

3

3

Advanced Liberal Arts and Sciences Electives: (Any 200 level course from anthropology, biology, chemistry, earth science, economics, foreign languages, geography, history,(except HIS\* K201 and HIS\* K202), LAS\* K250, literature, math, philosophy, physical science, SCI\* K250, physics, political science, psychology, sociology).



° Course has a prerequisite. Students should check course description.

+ It is important to note that no fewer than 61 credits are needed to complete the degree. If the one credit speech option is selected, students must be careful to take two fourcredit courses somewhere in the program or take an extra course.

\$ First Year Experience course equivalents are Perspectives in Criminal Justice (CJS\* K100) and Perspectives in Nursing (NUR\* K108).

Students who are planning on transferring to a four-year institution should check with their advisors, their future schools, or refer to the Selecting Electives list regarding General Education Requirements.

# **OTHER REQUIREMENTS:**

In selecting courses, each student must fulfill the following requirements:

# International/Intercultural Requirement

All degree-seeking students must complete one course which emphasizes a global, cross-cultural or multicultural perspective and encourages students to think beyond the boundaries of traditional Western European cultural perspectives.

Courses which satisfy this requirement are:

ANT\* K105Introduction to Cultural AnthropologyANT\* K136/MUS\* K104Music Cultures of the WorldANT\* K230Indigenous Peoples of the WorldARC\* K102Architecture of the WorldBIO\* K180/ENV\* K101Principles of Environmental Science/<br/>Environmental Studies

CJS* K198	Special Topics: Intro to Terrorism and Homeland Security
COM* K202	Intercultural Communication
ENG* K240	Studies in World Literature
ENG* K250	Studies in Ethnic Literature
ENG* K261	Women Writers Across Cultures
ENV* K101/BIO* K180	) Environmental Studies/Principles of
	Environmental Science
GEO* K111	World Regional Geography
HIS* K121	World Civilization I
HIS* K122	World Civilization II
HIS* K218	African American History
HIS* K244	Europe in the 20th Century
HIS* K257	War & Society in World Civilizations
HIS* K271	Modern Asia
MUS* K104/ANT* K136	Music Cultures of the World
PHL* K151	World Religions
POL* K103	Intro to International Relations
SOC* K103	Social Problems
SPA* K111/112	Elementary Spanish I & II
SPA* K211/K212	Intermediate Spanish I & II
SSC* K210	World Issues

#### **Oral Communication Requirement**

All degree-seeking students must complete one course to develop competency in oral communication; the courses which meet this requirement are: COM\* K109 Speech Practice 1 credit COM\* K173 Public Speaking 3 credits

These requirements do not increase the total number of credits needed to complete the degree; they can be met within the 60-61 credits of the degree program by choosing appropriate electives.

#### Program Outcomes and Statement of Core Values

Three Rivers Community College is committed to the belief that the best preparation for life, and especially for careers that require specialized training, is a broad acquaintance with human knowledge. The Liberal Arts degree program is designed to give students the opportunity to explore knowl edge from multiple perspectives. Students are challenged to become intellectually curious, aesthetically aware and critically perceptive, and to develop their communicative and quantitative skills. Through the study of the natural sciences, the social sciences, and the humanities, the Liberal Arts degree program gives students the flexibility to adapt to the changing needs of the workplace and the foundation necessary for lifelong learning and personal growth.

At the core of the Liberal Arts and Sciences is not any one discipline or knowledge base, but rather an attempt to perceive the interrelatedness of knowledge and the connectedness of human experience. In addition to exploring the traditions of thought and the central questions within selected areas of study, students completing the Liberal Arts and Sciences program will develop the ability to: • think critically and creatively

- Inink critically and creatively
- work collaboratively as well as independently
- communicate effectively both in speaking and in writing
- reason quantitatively as well as verbally
- value artistic expression

move beyond a narrow focus and recognize broader historical, cultural, global and scientific perspectives.
understand and reflect searchingly upon one's values and the values of others.

Liberal Arts and career education are interactive components. They enrich each other by helping students to make career choices in keeping with their understanding of themselves and their world. Together, they provide the skills and perspectives that make possible the dignity of work and social contribution. They cultivate a framework of meaning, value, ethical purpose and commitment that enrich every aspect of life.

They foster an attitude of critical inquiry, curiosity, openness and wonder that enables a spirit of lifelong learning.

# Library Technology Certificate Program

# **Certificate Program**

Program Coordinator: Marie Shaw- 860-449-4411

Our Library Technology certificate program is nationally accredited by the American Library Association through their Library Support Staff Certification (LSSC). Students who complete the Library Technology certificate at Three Rivers Community College demonstrate nationally accepted competencies of library service and operations. Students benefit from LSSC in many ways, such as it gives students proof of their achievements, their certification is portable in other states, and it provides students an edge on employment opportunities.

This 30 credit program is designed to prepare individuals for employment as library technical assistants as well as to improve the knowledge and skills of those already working in public, academic and special libraries.

Students may complete this certificate by completing the courses that are listed below. Courses may be taken in any order with the exception of those that require a prerequisite.

# LIBRARY TECHNOLOGY CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
CSA* K105	Introduction to Software Applications	3
ENG* K101°	Composition	3
LIB* K101	Introduction to Library Public Services	3
LIB* K104°	Introduction to Reference Services	3
LIB* K116°	Cataloging and Classification	3
LIB* K123	Introduction to Library Technical Services	3
LIB* K127	Management Strategies	3
LIB* K201°	Digital Resources in Libraries	3
	Computer Science Elective (LIB* K125 or a	
	contingent on advisor approval)	3
Library Technology	Elective + ##	
		3
	GRAND TOTAL	30

° Course has a prerequisite. Students should check college catalog course description.

+ Library Technology elective courses available: LIB\* K120, LIB\* K121, LIB\* K125, LIB\* K202

## LIB\* K202° is required for students with no practical library experience.

# Library Technology, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. explain the mission of libraries, departments and services of libraries, and basic library policies.

2. demonstrate good customer service and communication skills.

3. recognize and explain common library terminology. 4. apply knowledge of basic technology skills (including online computer automation systems; word processing, email, Internet and other productivity software; and internet and database searching techniques) to assist patrons in a rapidly changing technological environment.

5. explain basic reference and information resources and referral procedures.

6. explain basic library classification systems and use them to catalog and retrieve materials.

7. demonstrate appropriate methods and techniques for material processing, storage, and preservation.

#### **Manufacturing Engineering Technology**

Accredited by the Technology Accreditation Commission of ABET http://www.abet.org Associate in Science

Program Coordinator: Patrick Knowles - 860-215-9445

The Manufacturing Engineering Technology program is an excellent example of the merger between the traditional "handson" learning concepts and the newer computer application techniques in today's engineering technology education.

The student learns the basics such as the standard methods and practices of Tool Design and Production Planning and Statistical Process Control. The student's knowledge is expanded by exploring the more revolutionary techniques of CAD/CAM, Computer-Aided Manufacturing and Robotics in an automated system through concept and practical applications.

This new emphasis on the computer includes CAD (Computer-Aided Drafting), CAM (Computer-Aided Manufacturing), and FMS (Flexible Manufacturing System). FMS includes the applications of robots, automated storage/retrieval, material handling systems, automated process control and inspection systems, and work cells (such as integrated machining, special processing and assembly). Global manufacturing competition is taught through methods of increasing productivity in engineering technology and business functions as well as the production plant.

The Manufacturing Engineering Technology program has TAC/ABET (Technology Accreditation Commission of the Accreditation Board for Engineering and Technology) accreditation and a very active student chapter of the Society of Manufacturing Engineers on campus.

Local industries advise and work with the department on keeping the curriculum and equipment up to date to maintain a "state-of-the-art" program.

#### MANUFACTURING ENGINEERING TECHNOLOGY CURRICULUM- TAC/ABET ACCREDITED

(suggested two-year sequence)

Course ID SEMESTER I	Title of Course	Credits
ENG* K101°	Composition	3
MAT* K172°	College Algebra	(3)
MEC* K150°	Solid Modeling I	1
MEC* K150°	Solid Modeling I Lab	2
	•	3
MFG* K102	Manufacturing Processes	
MFG* K103	Manufacturing Processes Lab	1
PHY* K114°	Mechanics	(4)
TCN* K105	Laser and Lab Safety	1
	TOTAL	11
SEMESTER II		
EET* K105° +	Electronic Circuits and Systems	3
EET* K106° +	Electronic Circuits and Systems Lab	1
MAT* K186°	, Precalculus	4
MEC* K154°	Solid Modeling II	1
MEC* K155°	Solid Modeling II Lab	2
MEC* K114°	Statics	3
MEC* K262°	Material Science	3
MEC* K263°	Material Science Lab	1
MEC NZOJ		
	Fine Arts Elective	3
	TOTAL	21

SEMESTER III		
EET* K264°	Data Aquisition and Control	3
EET* K265°	Data Aquisition and Control Lab	1
ENG* K202°	Technical Writing	3
MAT* K167°	Principles of Statistics	3
MEC* K250°	Strengths of Materials	3
	Social Sciences Elective	3
	TOTAL	16
SEMESTER IV		
MFG* K118°	Computer Controls Laser Material Process	3
MFG* K119°	Computer Control Laser Process Lab	1
MFG* K221°	Mechatronics	3
MFG* K222°	Mechatronics Lab	1
MFG* K230°	Statistical Process Control	3
TCN* K291°	Interdisciplinary Capstone Design Project	3
	Science Elective with lab	4
	TOTAL	18
	GRAND TOTAL	66

° Course has a prerequisite. Students should check course description.

( ) Course is considered a prerequisite for this technology degree.

+ May substitute EET\* K144/K145 Fundamentals of Electric Circuits and Machines/Lab

## Manufacturing Engineering Technology, Associate in Science Degree Program Objectives

Graduates of the program in Manufacturing Engineering will: 1. be qualified to make technical contributions to and find employment in operations, design, development and manufacturing in the practice of manufacturing engineering technology. 2. have an appreciation for the need to be life long learners. demonstrate professionalism and a sense of social and ethical responsibility in their professional endeavors.

3. engage in professional development or study in a four-year program to pursue flexible career paths amid future technological changes.

## Manufacturing Engineering Technology, Associate in Science Degree Program Outcomes

By the time of graduation, students in the Manufacturing Engineering Technology program will:

1. practice the skills needed to work effectively in teams and as an individual.

2. demonstrate the ability to use appropriate mathematical and computational skills needed for engineering technology applications.

3. combine oral, graphical and written communication skills to present and exchange information effectively and to direct manufacturing activities.

4. know of a professional code of ethics.

5. describe concepts relating to manufacturing quality, timeliness and continuous improvement.

6. describe how the concepts of metal manufacturing, statistics, process automation, computer-aided design and manufacturing, and organizational management affects manufacturing operations.

 7. illustrate an ability to think critically and identify, evaluate and solve complex technical and non-technical problems;
 8. demonstrate creativity in designing problem solutions; and conduct and interpret experimental data and outcomes.
 9. recognize actions and acts of professionalism that allows

#### Manufacturing Engineering Technology: Laser Manufacturing Option

#### Associate in Science

Program Coordinator: Patrick Knowles - 860-215-9445

The Manufacturing Engineering Technology program is an excellent example of the merger between the traditional "hands-on" learning concepts and the newer computer application techniques in today's engineering technology education

The student learns the basics such as the standard methods and practices of Tool Design and Production Planning and Statistical Process Control. The student's knowledge is expanded by exploring the more revolutionary techniques of CAD/CAM, Computer-Aided Manufacturing and Robotics in an automated system through concept and practical applications. This new emphasis on the computer includes CAD (Computer-Aided Drafting), CAM (Computer-Aided Manufacturing), and FMS (Flexible Manufacturing System). FMS includes the applications of robots, automated storage/ retrieval, material handling systems, automated process control and inspection systems, and work cells (such as integrated machining, special processing and assembly). Global manufacturing competition is taught through methods of increasing productivity in engineering technology and business functions as well as the production plant.

Local industries advise and work with the department on keeping the curriculum and equipment up to date to maintain a "state-of-the-art" program.

#### MANUFACTURING ENGINEERING TECHNOLOGY CURRICULUM LASER MANUFACTURING OPTION

(suggested two-year sequence)

Course ID	Title of Course	Credits
SEMESTER I		
ENG* K101°	Composition	3
MAT* K172°	College Algebra	(3)
MEC* K152°	Fundamentals of Engineering Graphics	1
MEC* K153°	Fundamentals of Engineering Graphics Lab	2
MFG* K102	Manufacturing Processes	3
MFG* K103	Manufacturing Processes Lab	1
PHO* K101	Introduction to Light and Lasers	4
PHY* K114°	Mechanics	(4)
TCN* K105	Laser and Lab Safety	1
	TOTAL	15
SEMESTER II		
CAD* K106	Computer-Aided Drafting	1
CAD* K107	Computer-Aided Drafting Lab	2
EET* K105° +	Electronic Circuits and Systems	3
EET* K106° +	Electronic Circuits and Systems Lab	1
ENG* K202°	Technical Writing	3
MAT* K186°	Precalculus	4
PHO* K241°	Introduction to Laser Technology	3
PHO* K242°	Introduction to Laser Technology Lab	1
	TOTAL	18

SEMESTER III
EET* K <b>26</b> 4°
EET* K265°
MAT* K167°
PHO* K140°

EET* K264°	Data Aquisition and Controls	3	
EET* K265°	Data Aquisition and Controls Lab	1	
MAT* K167°	Principles of Statistics	3	
PH0* K140°	Optoelectronics	4	
	Fine Arts Elective	3	
	Science Elective with Lab	4	
	TOTAL	18	
SEMESTER IV			
MFG* K118°	Computer Controlled Laser Material Processing	3	
MFG* K119°	Computer Controlled Laser Material Processing Lab	1	
MFG* K230°	Statistical Process Control	3	
PH0* K230°	Laser Electronics	4	
TCN* K291°	Interdisciplinary Capstone Project	3	
	Social Sciences Elective	3	
	TOTAL	17	
	GRAND TOTAL	68	
° Course has a prerequisite. Students should check course			

°C description.

() Course is considered a prerequisite for this technology degree.

+ May substitute EET\* K144/K145 Fundamentals of Electric Circuits and Machines/Lab

#### Manufacturing Engineering Technology, Associate in **Science Degree Program Objectives**

Graduates of the program in Manufacturing Engineering will: 1. be qualified to make technical contributions to and find employment in operations, design, development and manufacturing in the practice of manufacturing engineering technology.

2. have an appreciation for the need to be life long learners. 3. demonstrate professionalism and a sense of social and ethical responsibility in their professional endeavors. 4. engage in professional development or study in a four-year program to pursue flexible career paths amid future technological changes.

#### Manufacturing Engineering Technology, Associate in Scien **Degree Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to: 1. practice the skills needed to work effectively in teams and as an individual. 2. demonstrate the ability to use appropriate mathematical and computational skills needed for engineering technology applications. 3. combine oral, graphical, and written communication skills to present and exchange information effectively and to direct manufacturing activities. 4. know of a professional code of ethics. 5. describe concepts relating to manufacturing quality, timeliness and continuous improvement. 6. describe how the concepts of computer-aided design and manufacturing, electronics, lasers, metal manufacturing, optics, organizational management, process automation and statistics affect manufacturing operations. 7. illustrate an ability to think critically and identify, evaluate and solve complex technical and non-technical problems; demonstrate creativity in designing problem solutions; and conduct and interpret experimental data and outcomes. 8. recognize actions and acts of professionalism that allow them to become informed and participating citizens cognizant of ethics, civic duty and social responsibility. 9. recognize the need to be lifelong learners.

FOR COMPLETE AND UP-TO-DATE ACADEMIC INFORMATION, VISIT WWW.THREERIVERS.EDU



#### Manufacturing, Introduction To (Level 1)

#### **Certificate Program**

Contact: Patrick Knowles- 860-215-9445

This 26-31 credit program is designed to provide students with the opportunity to acquire the knowledge and skill in preparation for entry level work in manufacturing. Students may complete this certificate by completing the courses that are listed below.

#### INTRODUCTION TO MANUFACTURING (LEVEL I) CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3
CAD* K106/K107	Computer-Aided Drafting and Lab	3
EET* K105/ K106°	Electronic Circuits and Systems and Lab	4
ENV* K130	Occupational Safety and Health	3
MAT* K095°	Elementary Algebra Foundations or higher	0-4
MEC* K152/K153°	Fundamentals of Engineering Graphics and La	b 3
MEC* K262/K263°	Material Science and Lab	
or	or	3-4
PHO* K101	Introduction to Light and Lasers	
MFG* K102/103	Manufacturing Processes and Lab	4
	GRAND TOTAL	26-31

° Course has a prerequisite. Students should check course description.

#### Introduction to Manufacturing (Level 1), Certificate Program Outcomes

Upon successful completion of the program requirements graduates will be able to:

1. practice the skills needed to work effectively in teams and as an individual.

2. demonstrate the ability to use appropriate mathematical and computational skills needed for entry-level work in manufacturing.

3. combine oral, graphical, and written communication skills to present and exchange information effectively and to direct manufacturing activities.

4. know the professional code of ethics.

5. describe concepts relating to manufacturing quality, timeliness and continuous improvement.

6. describe how the concepts of metal manufacturing and other basic manufacturing processes affect manufacturing operations.

7. illustrate an ability to think critically and identify, evaluate and solve technical and non-technical problems.
8. recognize actions and acts of professionalism that allow them to become informed and participating citizens cognizant of ethics, civic duty and social responsibility.
9. recognize the need to be lifelong learners.

IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY



#### **Marketing/Career**

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356 Associate in Science Program Coordinator: Irene Clampet - 860-215-9414

Marketing is recognized as the critical element in the success of large and small businesses and public or private organizations. The Marketing career program prepares students for professional positions in marketing, advertising, distribution and sales in profit and not-for-profit businesses and as entrepreneurs.

#### MARKETING/CAREER CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I		
ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3
BMK* K201°	Principles of Marketing	3
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
	TOTAL	16
SEMESTER II		
ACC* K118°	Managerial Accounting	4
BBG* K231°	Business Law I	3
BMG* K202°	Principles of Management	3
BMK* +	Marketing Elective +	3
BMK* + ECN* K101°	Principles of Macroeconomics	3
	TOTAL	16
SEMESTER III		
BBG* K210°	Business Communication	3
BBG* K232°	Business Law II	3
BMK* K +	Marketing Elective +	3
COM* K173°	Public Speaking	3
MAT* K123°	Elementary Statistics	3
	TOTAL	15
SEMESTER IV		
BMK* K292°	Practicum in Marketing	
or	or	3
	Elective from the following prefixes: ACC*, B	BG*.
	BES*, BFN*, BMG*, BMK*, HSP*	
BMG* K+	Marketing Elective +	3
GRA* K140°	Publication Design	3
	Fine Arts Elective	3
	Natural Sciences Elective	3-4
	TOTAL	15-16
	GRAND TOTAL	62-63
° Course has a p	rerequisite. Students should check cou	

° Course has a prerequisite. Students should check course description.

+ Marketing Electives

BMK* K103°	Principles of Retailing
BMK* K106°	Principles of Selling
BMK* K123°	Principles of Customer Service
BMK* K235°	Public Relations
BMK* K241°	Principles of Advertising

## Marketing, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Marketing.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Marketing.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

4. have obtained a well rounded general education.

5. be prepared for employment in the field of Marketing.

### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

#### Advertising/Public Relations Certificate Program

#### **Certificate Program**

Program Coordinator: Irene Clampet - 860-215-9414

This 28 credit certificate program is designed to prepare students for entry-level positions in marketing through a practical, skill-based, concentrated course of study. The program also offers employed students the opportunity to improve their background and skills. Students may complete this certificate program by completing the courses that are listed below.

Students may complete this certificate by completing the courses that are listed below.

#### MARKETING CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BMG* K202°	Principles of Management	3
BMK* K201°	Principles of Marketing	3
ECN* K101°	Principles of Macroeconomics	3
ENG* K101°	Composition	3
	Business Elective (accounting, business,	
	CSC, management, marketing, practicum)	3
Select 3 Courses Fro	om the Following 5 Courses:	9
BMK* K103	Principles of Retailing	
BMK* K106°	Principles of Selling	
BMK* K123°	Principles of Customer Service	
BMK* K235°	Public Relations	
BMK* K241°	Principles of Advertising	
	GRAND TOTAL	28
° C	where we take the Consult was also and all also also and	

° Course has a prerequisite. Students should check course description.

#### Marketing, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. identify the elements of marketing and their creative application in profit-making as well as in not-for-profit organizations in order to satisfy the needs and wants of society.

2. apply the practical use of marketing theories, tools, and strategies in order to pursue a professional career in marketing.

3. demonstrate skills in leadership, in decision-making and in teamwork, including the ability to work with diverse groups. 4. apply knowledge from other business disciplines to solve marketing problems.

5. demonstrate competency in all areas of business communication: oral, written, and technological.

6. explain the role of marketing and its interrelationship with other functional areas in order to achieve organizational goals.

#### **Customer Service Certificate Program**

#### **Associate in Science**

Program Coordinator: Irene Clampet - 860-215-9414

This 15 credit certificate is designed to develop skills in the area of customer service in a variety of business settings. It includes skills in effective communication, problem solving techniques and professional behavior in relationships with customers. These relationships are for internal and external customers in both business-to-business and consumerfocused environments. The studies in this certificate program focus on the concepts of return on customer and customer relationship management, which are perspectives tantamount to success in today's business world. This certificate will benefit students seeking entry level positions in customer service and working professionals who want to enhance their under standing of clear, effective communication with a business' internal and external customers. All of the courses required in the degree include hands-on assignments which apply course concepts to real world business experiments. Students may complete this certificate by completing the courses that are listed below.

#### CUSTOMER SERVICE CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BMK* K106°	Principles of Selling	3
BMK* K123°	Principles of Customer Service	3
BMK* K201°	Principles of Marketing	3
ENG* K100°	Reading/Writing Connection or HIGHER	3
Please choose one f	rom the following 4 courses:	3
BMG* K202°	Principles of Management	
BMK* K103	Principles of Retailing	
BMK* K235°	Public Relations	
BMK* K241°	Principles of Advertising	
	GRAND TOTAL	15
° C	vovo evulatino. Crival o esta ale o ul al ale o ale aou	

° Course has a prerequisite. Students should check course description.

#### **Customer Service, Certificate Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

 understand the importance of customer satisfaction.
 apply practical marketing communication strategies in serving the needs and wants of customers.

3. demonstrate competency in customer service using a variety of communication techniques including written, verbal, nonverbal and electronic.

4. possess skills in professional demeanor, service attitude and business etiquette.

#### Marketing/Transfer

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356 Associate in Science Program Coordinator: Irene Clampet - 860-215-9414

Marketing is recognized as the critical element in the success of large and small businesses and public or private organizations. The Marketing Transfer program prepares students for baccalaureate Marketing programs which may lead to professional positions in marketing, advertising, distribution and sales in profit and not-for-profit businesses and as entrepreneurs.

#### MARKETING/TRANSFER CURRICULUM

Course ID SEMESTER I	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BBG* K115°	Business Software Applications	3
BMK* K201°	Principles of Marketing	3
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
	TOTAI	16
SEMESTER II	TOTAL	10
BMK* K106°	Principles of Selling	3
ECN* K101°	Principles of Macroeconomics	
ENG* K102°	Literature and Composition	3 3
PSY* K247°	Industrial and Organizational Psychology	3
131 1247	TOTAL	12
SEMESTER III	TOTAL	12
ACC* K118°	Managerial Accounting	4
BMG* K202°	Principles of Management	3
BMK* K241°	Principles of Advertising	3
ECN* K102°	Principles of Microeconomics	3
MAT* K172°		3
MAI NIZ	College Algebra TOTAL	5 16
SEMESTER IV	IUIAL	10
	Dusiness Communication	n
BBG* K210°	Business Communication	3
BBG* K231°	Business Law I	3
BFN* K201°	Principles of Finance	3
	Fine Arts Elective	3
	Natural Sciences Elective with lab	4
	TOTAL	16
	GRAND TOTAL	60

° Course has a prerequisite. Students should check course description.

Marketing, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Marketing.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Marketing.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

4. have obtained a well rounded general education.

5. successfully transfer to a 4-year college/university Marketing program.

#### **Marketing Certificate Program**

#### **Certificate Program**

Program Coordinator: Irene Clampet - 860-215-9414

This 28 credit certificate program is designed to prepare students for entry-level positions in marketing through a practical, skill-based, concentrated course of study. The program also offers employed students the opportunity to improve their background and skills. Students may complete this certificate program by completing the courses that are listed below.

Students may complete this certificate by completing the courses that are listed below.

#### MARKETING CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BMG* K202°	Principles of Management	3
BMK* K201°	Principles of Marketing	3
ECN* K101°	Principles of Macroeconomics	3
ENG* K101°	Composition	3
	Business Elective (accounting, business,	
	CSC, management, marketing, practicum)	3
Select 3 Courses Fro	m the Following 5 Courses:	9
BMK* K103	Principles of Retailing	
BMK* K106°	Principles of Selling	
BMK* K123°	Principles of Customer Service	
BMK* K235°	Public Relations	
BMK* K241°	Principles of Advertising	
	GRAND TOTAL	28

° Course has a prerequisite. Students should check course description.

#### Marketing, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. identify the elements of marketing and their creative application in profit-making as well as in not-for-profit organizations in order to satisfy the needs and wants of society.

2. apply the practical use of marketing theories, tools, and strategies in order to pursue a professional career in marketing.

3. demonstrate skills in leadership, in decision-making and in teamwork, including the ability to work with diverse groups. 4. apply knowledge from other business disciplines to solve marketing problems.

5. demonstrate competency in all areas of business communication: oral, written, and technological.

6. explain the role of marketing and its interrelationship with other functional areas in order to achieve organizational goals.

### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A

#### PARTICULAR FIELD OF STUDY

FOR COMPLETE AND UP-TO-DATE ACADEMIC INFORMATION, VISIT WWW.THREERIVERS.EDU

#### **Marketing Core Certificate Program**

#### **Certificate Program**

Program Coordinator: Irene Clampet - 860-215-9414

This 15 credit certificate program is designed to prepare students for entry-level positions in marketing through a practical, skill based, concentrated course of study. The program also offers employed students the opportunity to improve their background and skills. Students may complete this certificate program by completing the courses that are listed below.

Students may complete this certificate by completing the courses that are listed below.

English Competency Requirement met by:\_

#### MARKETING CORE CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BMK* K106°	Principles of Selling	3
BMK* K123°	Principles of Customer Service	3
BMK* K201°	Principles of Marketing	3
BMK* K235°	Public Relations	3
BMK* K241°	Principles of Advertising	3
	GRAND TOTAL	15

° Course has a prerequisite. Students should check course description.

° English Competency Requirement is met by placement into ENG\* K101, transfer credit, or successful completion of ENG\* K100.

#### Marketing Core, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate knowledge of general business vocabulary and vocabulary specific to the field of marketing.

2. demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of marketing.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

#### Retail Management Certificate Program

#### **Certificate Program**

Program Coordinator: Irene Clampet - 860-215-9414

This 28 credit certificate program is designed to provide students with an opportunity to develop a skill-based foundation for a career in retail operations and management or as retail entrepreneurs. Completion of the requirements of this program will prepare the student for success in all facets of retail management.

Students may complete this certificate by completing the courses that are listed below.

#### **RETAIL MANAGEMENT CERTIFICATE CURRICULUM**

Course ID	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BMG* K202°	Principles of Management	3
BMK* K103°	Principles of Retailing	3
BMK* K106°	Principles of Selling	3
BMK* K201°	Principles of Marketing	3
BMK* K241°	Principles of Advertising	3
ENG* K101°	Composition	3
GRA* K140°	Publication Design	3
MAT* K123°	Elementary Statistics	3
	GRAND TOTAL	28

° Course has a prerequisite. Students should check course description.

#### Retail Management, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. explain the practical use of marketing strategies as they are applied in a retail environment in order to pursue a professional career in retail management.

2. demonstrate skills in the elements of retail management, including merchandising, supervision, customer service, and promotional activities.

3. demonstrate skills in leadership, motivation, and teamwork, including the ability to work with diverse groups in a retail environment.

 apply knowledge from other business disciplines to create effective retail strategies and solve retail business problems.
 demonstrate competency in quantitative and qualitative decision-making using technology and research techniques.
 explain to role of the consumer in retail management and strategy.

> IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

#### **Mechanical Engineering Technology**

Accredited by the Technology Accreditation Commission of ABET http://www.abet.org Associate in Science

Program Coordinator: Patrick Knowles - 860-215-9445

The Mechanical Engineering Technology program involves a broad range of subjects related to the design, manufacture, testing and development of various products, machines and systems.

The Mechanical program provides a learning experience in state-of-the-art laboratories on the most sophisticated equipment available. It is geared toward a practical hands-on experience that makes the Mechanical graduate a highly respected and marketable individual for many different types of industries.

Graduates of the Mechanical program can start immediately by working alongside of engineers in research, sales, or manufacturing industries. Typical types of starting positions include CAD operators, quality control specialists, robotic technicians, sales representatives, design technicians, testing technicians, etc. Building on a foundation of math, physics, humanities, and social sciences, the program trains and educates the student toward statics, machine design, fluid dynamics, and thermodynamics with emphasis upon the computer as a special tool to perform the task at hand.

The Mechanical Engineering Technology program also has a co-op option that allows the student to work while substituting the work experience for a technical elective. Many local industries are actively seeking and obtaining the Mechanical co-op student.

The job market for Mechanical graduates is very favorable. Currently the number of Mechanical job openings far exceeds the number of graduates on a nationwide trend. This situation means respectable and stable income for many years in the future. An investment of two years can turn into a lifetime of job security for the Mechanical graduate.

The Mechanical Engineering Technology program is accredited by TAC/ABET (Technology Accreditation Commission of the Accreditation Board for Engineering and Technology) which means that graduates of our program are recognized by other schools, colleges and universities nationwide. This accreditation is a valuable asset for transferring credits and also for obtaining employment.

The primary goal of the Mechanical Engineering Technology program is to prepare technicians and designers for employment in industry. However, many students transfer to four-year institutions, especially four-year engineering technology programs.

## MECHANICAL ENGINEERING TECHNOLOGY CURRICULUM TAC/ABET ACCREDITED

(suggested two-year sequence)

Course ID SEMESTER I	Title of Course	Credits
ENG* K101°	Composition	3
MAT* K172°	College Algebra	(3)
MEC* K150°	Solid Modeling I	1
MEC* K151°	Solid Modeling I Lab	2
MFG* K102	Manufacturing Processes	3
MFG* K103	Manufacturing Processes Lab	1

PHY* K114°		Mechanics	(4)
TCN* K105		Laser and Lab Safety TOTAL	1 11
SEMESTER II			
CSA* K105		Introduction to Software Applications	(3)
COM* K173°		Public Speaking	3
MAT* K186°		Precalculus	4
MEC* K114°		Statics	3
MEC* K154°		Solid Modeling II	1
MEC* K155°		Solid Modeling II Lab	2
MEC* K262°		Materials Science	3
MEC* K263°		Materials Science Lab	1
PHY* K115°		Heat Sound Light	4
		TOTAL	21
SEMESTER III			
EET* K105° +		Electronic Circuits and Systems	3
EET* K106° +		Electronic Circuits and Systems Lab	1
MAT* K254°		Calculus I	4
MEC* K231°		Computer-Aided Engineering	1
MEC* K232°		Computer-Aided Engineering Lab	2
MEC* K250°		Strength of Materials	3
MEC* K272°		Fluid Mechnics/Thermodynamics	4
		TOTAL	18
SEMESTER IV			
ENG* K202°		Technical Writing	3
MEC* K241°		Thermodynamics	3
MEC* K270°		Introduction to Fluid Dynamics	3
MEC* K275°		Thermal Sciences Lab	1
MEC* K281°		Machine Design	3
TCN* K291°		Interdisciplinary Capstone Design Project	3
	_	Humanities/Social Science Elective	3
	++	Technical Elective	2-3
		TOTAL	17-18
		GRAND TOTAL	67-68
° C 1			

° Course has a prerequisite. Students should check course description.

() Course is considered a prerequisite for this technology degree.

+ May substitute EET\* K144/K145 Fundamentals of Electric Circuits and Machines/Lab

++ The technical elective may include additional CAD courses or specialized courses such as Welding Engineering Applications (with approval of Program Coordinator).

#### Mechanical Engineering Technology, Associate in Science Degree Program Objectives

Graduates of the Mechanical Engineering Technology program will:

1. be qualified to make technical contributions to and find employment in operations, design, development and manufacturing in the practice of mechanical engineering technology.

2. have an appreciation for the need to be life long learners. demonstrate professionalism and a sense of social and ethical responsibility in their professional endeavors.

3.engage in professional development or in study in a four-year program to pursue flexible career paths amid future technological changes.

#### The Nuclear Engineering Technology program operates in

cooperation with Millstone Station to produce entry-level technicians primarily for the commercial nuclear power industry. Millstone Station offers full scholarships through the college for up to 15 full-time freshman enrolling in the Nuclear Engineering Technology program. However, the program is open to all qualified students, with or without scholarship aid.

Using classroom, laboratory, and simulator instruction, students are educated in the theories underlying the actual safe operation of nuclear power generating stations. Additional "hands-on" experience may be gained through 12 weeks of summer co-op employment at Millstone Station's nuclear power plants.

Potential job areas upon graduation include health physics, nuclear chemistry, reactor engineering and power plant operation/maintenance. The program also provides academic preparation for a career as a reactor operator. This career path involves further training by the utility and successful completion of a license examination administered by the Nuclear Regulatory Commission. For many students, the Associate Degree in Nuclear Engineering Technology is but one step in their academic career as they move on to pursue higher degrees upon graduating from Three Rivers.

The Nuclear Engineering Technology program is accredited by TAC/ABET (Technology Accreditation Commission of the Accreditation Board for Engineering and Technology).

#### NUCLEAR ENGINEERING TECHNOLOGY CURRICULUM-

TAC/ABET ACCREDITED (suggested two-year sequence)

Credits Title of Course Course ID SEMESTER I CHE\* K121° General Chemistry I 4 + Computer Science Elective 3-4 ENG\* K101° Composition 3 Precalculus MAT\* K186° (4) NUC\* K100 Introduction to Nuclear Systems 3 PHY\* K114° Mechanics (4) TOTAL 13-14 SEMESTER II COM\* K173° Public Speaking (3) ENG\* K202° Technical Writing 3 MAT\* K254° Calculus I 4 NUC\* K110° Radiation, Health, Safety 2 NUC\* K111° Radiation, Health, Safety Lab 1 NUC\* K117° Atomic and Reactor Physics 4 NUC\* K118° Nuclear Chemistry 1 PHY\* K115° Heat Sound Light 4 19 TOTAL SEMESTER III Fundamentals Electrical Circuits and Machines 3 EET\* K144° EET\* K145° Fundamentals Electrical Circuits and Machines Lab1 Calculus II MAT\* K256° 4 MEC\* K272° Fluid Mechanics/Thermodynamics 4 NUC\* K250° Reactor Theory 4 NUC\* K252° Nuclear Materials Science 2 NUC\* K262° Nuclear Materials Science Lab 1 TOTAL 19 SEMESTER IV 2 MEC\* K274° Heat Transfer MEC\* K275° Thermal Sciences Lab 1 2 NUC\* K210° # Nuclear Instruments and Control NUC\* K211° # Nuclear Instruments and Control Lab 1 NUC\* K220° Nuclear Simulator 1 NUC\* K221° Nuclear Simulator Lab 1 2 NUC\* K230° Nuclear Topics Humanities/Social Sciences/Fine Arts Elective 3 ++ Restricted Elective 3 16 TOTAL

° Course has a prerequisite. Students should check course description.

**GRAND TOTAL** 

() Course is considered a prerequisite for this technology degree.

+ Typical selections are CSA\* K105 or CSC\* K108 to support future employment and education.

# Students may select another 3 credit Technology elective to replace NUC\* 210/K211 to better meet their employment/ future education goals with the approval of the Program Coordinator.

++ An additional Humanities/Social Science/ Fine Arts Elective is recommended. Or, another course appropriate for future employment may be selected with approval of the Program Coordinator.

67-68



#### Mechanical Engineering Technology, Associate in Science **Degree Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. practice the skills needed to work effectively in teams and as an individual.

2. demonstrate the ability to use appropriate mathematical and computational skills needed for engineering technology applications.

3. Combine oral, graphical and written communication skills to present and exchange information effectively and to direct manufacturing activities.

4. know of a professional code of ethics.

5. have the ability to work professionally in both thermal and mechanical systems areas including the design and realization of such systems.

6. be able to function competently in a laboratory setting, making measurements, operating technical equipment, critically examining experimental results, and properly reporting on experimental results, including their potential for process improvement.

7. Illustrate an ability to think critically and identify, evaluate and solve complex technical and non-technical problems; demonstrate creativity in designing problem solutions; and conduct and interpret experimental data and outcomes. 8. recognize the actions and acts of professionalism that allows them to become informed and participating citizens cognizant of ethics, civic duty and social responsibility. 9. recognize the need to be lifelong learners.

#### **Nuclear Engineering Technology**

#### Accredited by the Technology Accreditation Commission of ABET http://www.abet.org **Associate in Science**

Program Coordinator: James Sherrard - 860-215-9472



## Nuclear Engineering Technology

#### Nuclear Engineering Technology, Associate in Science Degree Program Objectives

Graduates of the Nuclear Engineering Technology program will: 1. demonstrate a mastery of knowledge, skills and problem solving abilities required for entry level employment in the commercial nuclear power or health physics fields.

demonstrate technical strengths in the areas of nuclear processes and operations, nuclear systems and radiological safety.
 adopt life long learning and intellectual growth as an integral part of a career in nuclear engineering technology due to continuing engineering and scientific reactor system technology improvements.

4. possess a solid nuclear knowledge base for a program base for a program graduate to transfer as an entering junior into a baccalaureate degree program in nuclear engineering or health physics.

#### Nuclear Engineering Technology, Associate in Science Degree Program Outcomes

By the time of graduation, students in the Manufacturing Engineering Technology program will:

1. apply an understanding of nuclear systems and operations 2. apply an understanding of radiological safety and radiation protection procedures.

3. know the applicable rules and regulations, and describe the roles of maintenance, control, performance, the human interface in the operations and quality assurance.

4. understand, demonstrate and value the safe operation of nuclear systems.

5. solve problems using foundation mathematics, physical sciences and nuclear technology for nuclear industry constituents served by the degree program.

6. conduct, analyze and interpret laboratory experiments. interpret laboratory analyses that measure nuclear and radiation processes.

7. demonstrate effective oral and written communication skills.

8. demonstrate the use of library and on-line information sources in problem solving.

9. serve as productive team members.

10. recognize the need to be life long learners.

#### Nursing

Accredited by the National League for Nursing Accrediting Commission (NLNAC) 3343 Peachtree Rd NE, Suite 500, Atlanta, Georgia 30326 Telephone 404-975-5000 http://www.nlnac.org/home.htm Associate in Science Interim Director of Nursing & Allied Health:

Edith Ouellet - 860-215-9427

#### The Connecticut Community Colleges Nursing Program: Three Rivers Community College Campus

Three Rivers Community College is one of six campuses offering The Connecticut Community Colleges Nursing Program (CT-CCNP), an innovative associate degree nursing program offered at five Connecticut Community Colleges. The CT-CCNP is designed to prepare registered nurses to function in the professional role utilizing current standards of nursing practice. As a campus site of CT-CCNP, TRCC is committed to the educational preparation of safe, competent, associate degree entry level practitioners of nursing. This is accomplished through an educational experience which involves active and diverse learning processes. Program graduates are prepared to assume the multi-faceted role of the professional nurse which includes planning and provision of care, client advocacy, communication, teaching, and managing human, physical, financial and technological resources. Graduates possess the ability to recognize and respond to current trends and issues while upholding standards of care through lifelong learning.

Nursing is a dynamic profession that incorporates evidencedbased theory and skills required for safe practice. Nursing practice integrates the art and science of nursing with theoretical principles from the natural, social, behavioral biological and physical sciences. Six core values provide the framework for organizing the curriculum. The core values are:

- · Critical Thinking
- · Safe and Competent Practice
- · Caring
- $\cdot$  Professionalism
- Communication
- · Holistic Care

The CT\_CCNP is a two-year four semester program which, upon successful completion, awards an Associate in Science Degree. Sixty-eight credits are required for graduation. These include general education courses and nursing courses sequenced to build from fundamental skills to complex critical thinking skills. The program is challenging in nature, demanding mathematics, science, social science and English skills as building blocks to all that encompasses nursing practice.

## The Role of the Associate Degree Graduate within the Scope of Nursing Practice

The CT-CCNP will provide the student with the knowledge and technical skills to practice in a safe, effective and competent manner within the legal and ethical framework for an entrylevel Registered Nurse. The scope of practice for the Associate Degree graduate is to provide and manage care for a diverse group of individuals, families and communities in collaboration with members of the heath care team consistent with CT-CCNP core values. The course of study prepares graduates for employment in a variety of settings, extended-care facilities, acute-care hospitals, clinics, doctor's offices, etc.

#### **Nursing Admission Requirements**

See the catalog section on Selective Nursing Admission Criteria for explanation of nursing admissions criteria and process. Please visit us online at http://www.trcc.commnet. edu/Div\_StudentServices/admissions/NursingStudent.shtml to obtain additional information. Please plan to attend a Nursing Information Session at the college, schedule is available on the website.

#### Articulation

Three Rivers Community College fully participates in the Connecticut Nursing Articulation Model for the educational advancement of all nurses. Licensed Practical Nurses may take the Connecticut League for Nursing/Charter Oak State College Bridge Course upon acceptance and enter as far along as the third semester of the program. Upon acceptance into the CT-CCNP at Three Rivers Community College, all LPN candidates are individually assessed by our Admissions Department and by specialized nursing advisors to determine appropriate placement in the program. All graduates are encouraged to advance their education in nursing toward the baccalaureate degree or further. Information about these opportunities is available at http://www.commnet.edu/ nursing/Educational\_Opportunities.asp.

#### NURSING CURRICULUM

Course ID	Title of Course	Credits
ADMISSION REG	QUIRMENTS	
BIO* K211°	Anatomy and Physiology I	4
ENG* K101°	Composition	3
PRE-REQUISITE	REQUIREMENT	
BIO* K212°	Anatomy and Physiology II	4
SEMESTER I		
BIO* K235°#	Microbiology	4
PSY* K111°#	General Psychology I	3
NUR* K101°	Introduction to Nursing Practice	8
	TOTAL	15
SEMESTER II		
PSY* K201°#	Life Span Development	3
SOC* K101°#	Principles of Sociology	3
NUR* K102°	Family Health Nursing	8
NUR* K103°	Pharmacology for Families Across the Lifespan	1
	TOTAL	15
SEMESTER III		
ENG* K102°#	Literature and Composition	3
NUR* K201°	Nursing Care of Individuals and Families I	8
NUR* K202°	Pharmacology for Individuals and Families wit	h
	Intermediate Health Care Needs	1
	TOTAL	12
SEMESTER IV		
NUR* K203°	Nursing Care of Individuals and Families II	8
NUR* K204°	Pharmacology for Individuals, Families and Gr	oups
	with Complex Health Care Needs	1
NUR* K205°	Nursing Management and Trends	2
#	Humanities or Fine Arts Elective	3
	TOTAL	14
	GRAND TOTAL	68



Students must be enrolled in the Nursing program in order to enroll in Nursing courses.

° Course has a prerequisite. Students should check course description.

# May be taken prior to admission to the nursing program.

#### Nursing, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. integrate the principles of the natural, physical, social, biological and behavioral sciences and nursing theory to provide holistic care to individuals, families and groups across the wellness-illness continuum.

2. integrate nursing process and critical thinking skills for decision making in nursing practice

3. provide safe and competent care to clients utilizing evidenced-based practice, quantitative reasoning and technological proficiency.

4. integrate effective communication skills through professional interactions with individuals, families, groups and the health care team.

5. create an environment where therapeutic interventions reflect a respect for human dignity.

6. collaborate as a member of a multidisciplinary health team.7. integrate accountability and responsibility for practice within the legal and ethical standards of the nursing profession.8. function in the professional role utilizing current standards of nursing practice.

#### WAIVER OF LICENSURE GAURENTEE

Upon successful completion of the Associate of Sciences degree with a major in Nursing, the graduate is eligible to take the National Council of State Boards of Nursing's Licensure Examination for Registered Nurse (NCLEX-RN). Graduation from the CT-CCNP does not guarantee licensure to practice nursing. Licensure requirements and procedures are the responsibility of the Connecticut Department of Public Health, State Board of Examiners for Nursing. Permission to take the NCLEX-RN examination is established by law and granted by the Connecticut State Board of Examiners for Nursing.

#### FELONY CONVICTION

At the time of application for RN licensure an applicant will be asked the following question by the Connecticut Department of Public Health: "Have you ever been found guilty or convicted as a result of an act which constitutes a felony under the laws of this state, federal law or the laws of another jurisdiction and which, if committed within this state, would have constituted a felony under the laws of this state? If you answer is "yes", give full details, dates, etc., on a separate notarized statement and furnish a Certified Court Copy (with court seal affixed) or the original complaint, the answer, the judgment, the settlement, and/or the disposition."

#### **Exercise Science**

#### Associate in Science

Program Coordinator: Heidi Zenie - 860-215-9485

This 67 credit program is designed to provide a strong basic foundation in the area of exercise science as well as a broad background in general education. For those students seeking an entry level position in health and fitness, the Exercise Science program prepares students for necessary industry certifications and the knowledge and motivation to continue as life long learners in health and fitness. For students interested in furthering their education by transferring to a four-year institution, the program prepares students to transfer to an exercise science or other health related program.

#### **EXERCISE SCIENCE CURRICULUM**

Course ID SEMESTER I	Title of Course	Credits
ENG* K101°	Composition	3
HPE* K105°	Introduction to Fitness and Training	3
HPE* K232°	First Aid and Sports Injury	2
MAT* K186°	Precalculus	4
PSY* K111°	General Psychology I	3
	TOTAL	15
SEMESTER II		
BIO* K121°	General Biology	4
CHE* K111°	Concepts of Chemistry	4
HPE* K130	Weight Training and Fitness	3
ENG* K102°	Literature and Composition	3
RLS* K101°	Introduction to Recreation and Leisure Services	s
or	or	3
<b>PSY* K244°</b>	Sports Psychology	
	TOTAL	17
SEMESTER III		
BIO* K111°	Introduction to Nutrition	3
BIO* K211°	Anatomy and Physiology I	4
COM* K173°	Public Speaking	3
HPE* K241°	Exercise Physiology with Lab	4
HPE* K245°	Program and Prescription I	4
	TOTAL	18
SEMESTER IV		
BIO* K212°	Anatomy and Physiology II	4
CSA* K105	Introduction to Software Applications	3
HPE* K243°	Kinesiology with Lab	4
HPE* K246°	Programming and Prescription II	3
	Fine Arts Elective	3
	TOTAL	17
	GRAND TOTAL	67

° Course has a prerequisite. Students should check course description

#### Exercise Science, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. plan, administer, and evaluate wellness and fitness programs, nutrition projects, and exercise physiology in clinical, industrial and corporate environments.

2. describe and apply principles of leadership, including motivat-

ing, leading and directing.

3. develop a medically-based fitness model.

understand the terminology in medicine, health promotion and fitness.

4. gain an understanding of how to design exercise programs for special populations

5. understand how to establish exercise programs/prescriptions, exercise related goals and objectives, training modifications and program evaluation strategies.

 collaborate with a variety of health care professionals through consultations and referrals in a multi-disciplinary approach to wellness.

7. think critically to effectively solve problems in a variety of dynamic environments.

8. effectively communicate with health career providers, fitness professionals, clients, administrators, family and community in the delivery of life long health and wellness.

Additionally, the graduate will complete the comprehensive learning outcomes identified within the General Education Component.

#### Health Career Pathways Certificate Program

#### **Certificate Program**

Program Coordinator: Edith Ouellet, Interim Director of Nursing & Allied Health - 860-215-9427

This program is designed to assist the student to achieve success in healthcare programs. Students will be provided with the foundation necessary for healthcare professions. Credits for this program may be applied toward healthcare program requirements within Connecticut's Community College system. However, completion of this program does not guarantee automatic acceptance into any healthcare program. Students are responsible for verifying specific requirements for their programs of interest. Students may complete this certificate by completing the courses that are listed below.

#### HEALTH CAREER PATHWAYS CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BIO* K121°	General Biology I	4
BIO* K211°	Anatomy and Physiology I	4
BIO* K212°	Anatomy and Physiology II	4
CHE* K111°	Concepts in Chemistry	4
ENG* K101°	Composition	3
HLT* K103°	Investigations in Allied Health	3
MAT* K137°	Intermediate Algebra	3
<b>PSY</b> * K111°	General Psychology I	3
	GRAND TOTAL	28

° Course has a prerequisite. Students should check course description.

#### Health Career Pathways, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate competence in written and oral communication. demonstrate critical thinking, logical reasoning and problem solving skills.

2. effectively utilize and interpret medical terminology.

3. identify a variety of career opportunities and roles available in health care professions.

4. meet most requirements for entrance into health care programs.

5. demonstrate an understanding of the impact of psychological principles and how they relate to the health care field.

### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE

DEGREE PROGRAM FOR A

PARTICULAR FIELD OF STUDY

## Health and Wellness

#### **Sports and Leisure Management**

#### **Associate in Science**

Program Coordinator: Heidi Zenie - 860-215-9485

This 62 credit program will provide the student with knowledge in areas of recreational management, fitness and training, nutrition, facility design and management, marketing, business law, accounting and risk management. Students receiving this degree would work as an Athletic Director, Facilities Manager, in Professional Sports Management, and travel/leisure.

#### SPORT AND LEISURE MANAGEMENT CURRICULUM

Course ID SEMESTER I	Title of Course	Credits
ACC* K111°	Principles of Accounting 1	4
ENG* K101°	Principles of Accounting I Composition	3
HPE* K105°	•	з 3
HPE* K232°	Introduction to Fitness and Training	3 2
	First Aid and Sports Injury	2
MAT* K137°	Intermediate Algebra TOTAI	3 15
SEMESTER II	TOTAL	IJ
BIO* K115°	Human Biology	4
BBG* K231°	Business Law I	3
HPE* K130°	Weight Training/Fitness	3
RLS* K101°	Introduction to Recreation and Leisure Service	
ECN* K101°	Macroeconomics	3
	TOTAL	16
SEMESTER III	TOTAL	10
BIO* K111°	Introduction to Nutrition	3
BMK* K201°	Principles of Marketing	3
COM* K173°	Public Speaking	3
HPE* K245°	Programming and Prescription I	4
PSY* K111°	General Psychology	3
	TOTAL	16
SEMESTER IV		
BBG* K115°	Business Software Applications	3
BMG* K202°	Principles of Management	3
HPE* K246°	Programming and Prescription II	3
RLS* K218°	Organization and Administrations	
	of Sport and Leisure	3
	Fine Arts Elective	3
	TOTAL	15
	GRAND TOTAL	62
° Course has a pr	erequisite Students should check cour	se

 Course has a prerequisite. Students should check course description

## Sports and Leisure Management, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. demonstrate an understanding of management issues and trends in the sport and exercise field.

2. understand the connection between various management functions and coordination of agency resources, programs and resources.

3. apply the concept areas related to personnel process, including candidate recruitment, candidate selection, orientation, training and development and performance

#### appraisal.

4. demonstrate a mastery of the basic principles, concepts and terminology of today's marketing strategy.

5. develop an awareness of the importance of marketing in today's competitive, consumer-oriented society.

6. understand the importance of societal issues of computer security risks, privacy risks, identity theft and technological impacts on our culture.

7. demonstrate knowledge of the history and principles governing business law in the United States.

8. evaluate target populations to further understand the needs and options of a variety of participants.

9. have knowledge of the concept of activities of daily living and its importance in the overall health of the individual.10. analyze the developmental characteristics for each stage life stage that are the most relevant to the design and delivery of leisure and recreation service.

11. identify key aspects of facility and equipment maintenance and cleaning, implement appropriate maintenance and cleaning schedules.

12. evaluate various strategies for effectively scheduling of facilities and programs.

13. identify common areas of potential litigation in the strength and conditioning facility.

14. demonstrate knowledge and application of inventory (cost flos; periodic; perpetual) accounting and reporting.

#### Pathway to Teaching Careers

#### **Associate in Science**

Program Coordinator: Sheila Skahan- 860-215-9475

This 67 credit program is designed to provide education and experiences which will allow students to transfer to Eastern Connecticut State University meeting the requirements to be accepted into a teacher training program; expand opportunities for minority and bicultural students; open new doors to those who desire and can benefit from a college education; and meet the workforce demands for teachers in Connecticut

#### PATHWAY TO TEACHING CAREERS CURRICULUM

Course ID	Title of Course	Credits
Composition, Litera	ture and Speech	
ENG* K101°	Composition	3
ENG* K102°	Literature and Composition	3
COM* K173°	Public Speaking	3
Fine Arts (Select two of the following courses) 6		
	Select one course from the following: ARC*	K102, ART*
	K107, ART* K121, THR* K101, MUS* K104	/ANT*
	K136*	
	Select one course from the following: ART*	K111, THR*
	K110, or THR* K121* (* meets T2CE at ECS	5U)

#### Humanities

Two semesters of the same foreign language are required. Only Liberal Arts and Sciences electives may be substituted if two years of the same language, with a grade of "C" or better, were completed at the high school level. High school transcript and college verification required for substitution. S

 PHL* K101°	Introduction to Philosophy	
or	or	
PHL* K111°	Ethics	
Mathematics (sel	ect one of the following)	
For Elementary E	•	
MAT* K143° (	Math for Elementary Education	
or	, or	
For Secondary Ec	ducation	
MAT* K146°	Math for the Liberal Arts	
Natural Science (	(select one of the following)	
OCE* K101	Oceanography	
or	or	
ENV* K101	Environmental Studies	
Earth or Physical	Science (select one of the following)	
BIO* K115°	Human Biology	
or	or	
BIO* K121°	General Biology I	
or	or	
EAS* K110°	Earth Science	
Social Sciences		
HIS* K201°	United States History I	
or	or	
HIS* K202°	United States History II	
PSY* K111°	General Psychology	
PSY* K200°	Child Psychology	
or	or	
ECE* K182°	Child Development	

SOC* K101° Education	Principles of Sociology	3
CSA* K105	Introduction to Software Applications	
or	or	3
BBG* K115°	Business Software Applications	
HLT* K155°	Personal Health	3
ECE* K215°	The Exceptional Learner	3
EDU* K110°	Teaching in the Twenty First Century	3
PSY* K204°	Child and Adolescent Development	3
Other Electives: (Cou	rses applicable in the intended major.	
Recomendations are ENG* K2xx for elementary education and		
MAT* K167 for seco	•	6

GRAND	ΤΟΤΛΙ
UNAND	TUTAL

° Course has a prerequisite. Students should check course description.

#### Pathway to Teaching Careers, Associate in Arts Degree **Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. think critically and creatively.

2. communicate analytically, in both speaking and writing, in forms that involve the collection and documentation of outside sources.

3. work collaboratively as well as independently.

recognize broader historical, cultural, global and scientific perspectives.

4. cultivate a respect for others, coupled with an understanding of ethical behavior and civic responsibility.

5. begin to develop the ability to work in the teaching profession, articulating both the route to become and the role of a successful teacher in the classroom.

67



## Small Business and Entrepreneurial Studies

Accredited by the Association of Collegiate Business Schools and Programs (ACBSP) 11520 West 119th St. Overland Park, KS 66213 Telephone 913-339-9356 **The Associate in Science** 

Program Coordinator: Larry Flick - 860-215-9426

The Small Business and Entrepreneurial Studies associate degree program prepares students to start their own businesses as well as developing careers in business management. It gives students the knowledge and skills needed to develop a business plan and run a small business. This program also serves those individuals who are already in business or in corporations and want to develop entrepreneurial components of that business.

## SMALL BUSINESS AND ENTREPRENEURIAL STUDIES CURRICULUM

Course ID SEMESTER I	Title of Course	Credits	
ACC* K111°	Principles of Accounting I	4	
BBG* K115°	Business Software Applications	3	
ENG* K101°		3	
IDS K105	Composition	3	
MAT* K123°	First Year Experience	ა ვ	
MAI' KIZ3	Elementary Statistics	3 16	
	TOTAL	10	
SEMESTER II	<b>u</b> •1 <b>u</b>		
ACC* K118°	Managerial Accounting	4	
BES* K118°	Small Business Management	3	
BMK* K201°	Principles of Marketing	3	
ECN* K101°	Principles of Macroeconomics	3	
	Fine Arts Elective	3	
	TOTAL	16	
SEMESTER III			
BBG* K231°	Business Law I	3	
BES* K218°	Entrepreneurship	3	
BMG* K202°	Principles of Management	3	
COM* K173°	Public Speaking	3	
	Business Elective with one of the		
	following prefixes: ACC*, BBG*, BES*,		
	BFN*, BMG*, BMK* or HSP*.	3	
	TOTAL	15	
SEMESTER IV			
BBG* K210°	Business Communication	3	
BBG* K232°	Business Law II	3	
BES* K239°	Business Plan Development	3	
BMG* K220°	Human Resources Management	3	
	Natural Sciences Elective	3-4	
	TOTAL	15-16	
	GRAND TOTAL	62-63	
° Course has a p	° Course has a prerequisite. Students should check course		
description.			

## Small Business and Entrepreneurial Studies, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

 demonstrate knowledge of general business vocabulary and vocabulary specific to the field of Entrepreneurship.
 demonstrate knowledge of those principles and skills applicable to general business and those specific to the field of Entrepreneurship.

3. demonstrate the ability to apply learned principles and skills to unique factual settings using correct vocabulary.

4. have obtained a well rounded general education.

5. be prepared for employment in the field of Entrepreneurship after graduating.

#### Small Business and Entrepreneurial Studies Certificate Program

#### **Certificate Program**

Program Coordinator: Larry Flick - 860-215-9426

This 28-29 credit hour certificate is designed for students who want to start and/or run their own business. Practical application to job situations will be stressed. Students may complete this certificate by completing the courses listed below.

Students may complete this certificate by completing the courses that are listed below.

## SMALL BUSINESS AND ENTREPRENEURIAL STUDIES CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ACC* K111°	Principles of Accounting I	4
BES* K118°	Small Business Management	3
BES* K218°	Entrepreneurship	3
BES* K239°	Business Plan Development	3
BMK* K201°	Principles of Marketing	3 3 3 3
ECN* K101°	Principles of Macroeconomics	3
ENG* K101°	Composition	3
Please select two cou	urses from the following list:	6-7
ACC* K118°	Managerial Accounting	
ACC* K125°	Accounting Computer Applications I	
BMG* K218°	Operations Management	
BMG* K220°	Human Resources Management	
BMK* K103	Principles of Retailing	
BMK* K106°	Principles of Selling	
BMK* K123°	Principles of Customer Service	
BMK* K241°	Principles of Advertising	
ECN* K102°	Principles of Microeconomics	
	GRAND TOTAL	28-29
0 <b>C</b>		1

° Course has a prerequisite. Students should check course description.

#### **Entrepreneurial Studies, Certificate Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. understand the role of the entrepreneur in developing a business.

2. understand the basics of managing a small business. develop a small business plan.

3. understand basic accounting principles in order to do required bookkeeping.

## IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A

PARTICULAR FIELD OF STUDY

#### **Technology Studies**

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven,

The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

#### **ASSOCIATE DEGREE**

Contact: Patrick Knowles - 860-215-9445

This program is designed for entry into Central Connecticut State University's School of Technology or Charter Oak State College. The "Technology Studies Pathway" consists of courses which provide the foundation for:

• A Bachelor of Science Degree from Central Connecticut State University in engineering technology, industrial technology or technology education.

• A Bachelor of Science Degree from Charter Oak State College. A minimum course grade of "C" and college credit, as described below, are required for continuing at CCSU's School of Technology or at Charter Oak.

#### **TECHNOLOGY STUDIES CURRICULUM**

Course ID GENERAL EDUCATIO Arts/Humanities	Title of Course N:	Credits
COM* K173°	Public Speaking	3
ENG* K101°	Composition	3 3 3 3 3
ENG* K202°	Technical Writing	3
	Fine Arts Elective (art, music)	3
	Philosophy Elective	3
Math and Science		
CHE* K111°	Concepts of Chemistry	
or	or	4
CHE* K121°	General Chemistry I	
MAT* K167°	Principles of Statistics	3
MAT* K186°	Precalculus	4
PHY* K114°	Mechanics	4
Social/Behavioral S	ciences	
	Behavioral Sciences Elective	
	(psychology or sociology)	3
	Social Sciences Elective	
	(economics or history recommended)	3
	Social Sciences Elective (geography,	
	political science or history recommended)	3
	Social Sciences Elective	
	(economics recommended)	3

Specialized Core		
CAD* K106	Computer-Aided Drafting	1
CAD* K107	Computer-Aided Drafting Lab	2
	Directed Elective	3
	Directed Elective	3
Options		
	Technical Elective	3
	GRAND TOTAL	66

° Course has a prerequisite. Students should check course description.

#### Technology Studies, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

 transition seamlessly into a Bachelor of Science Degree Program in Technology with junior level status in the receiving institution as part of the Technology Studies Pathway Program.
 demonstrate team-oriented skills that permit effective participation in multicultural work and social environments.
 apply appropriate mathematical and scientific principles to industrial technology applications.

4. perform competently in mathematics.

5. express ideas effectively through written and oral communications.

6. demonstrate proficiency in technical fundamentals to analyze industrial technology problems and make appropriate decisions.

7. maintain a practical knowledge of state-of-the-art hardware and software.

 apply skills and knowledge to effectively and efficiently plan, organize, implement, measure and manage technology.
 demonstrate a thorough knowledge and understanding of engineering graphics as well as conventional drafting practices, such as orthographic and isometric projection, section, detail, auxiliary views, descriptive geometry, as well as geometric dimensioning and tolerancing basics.

10.demonstrate a high level of proficiency in the use of stateof-the art computer aided design (CAD) software and be able to respond positively to continuous software revisions and upgrades.

#### Technology Studies: Biomolecular Science Option

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven.

The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

#### **Associate in Science**

Contact: James Copeland- 860-215-9416

This option will create a new area of emphasis for the College of Technology, providing an area of specialty for students who wish to go into a biomolecular science career as a laboratory technician and/or pursue a baccalaureate degree through the Pathways program at Central Connecticut State University in Biomolecular Sciences. The associate's degree can also serve as a career-oriented degree for students who choose to enter workforce in various laboratory environments such as an academic research laboratory, environmental laboratory, or medical laboratory.

#### **BIOMOLECULAR SCIENCE OPTION CURRICULUM**

Course ID	Title of Course	Credits	
GENERAL EDUCATIO	DN:		
Arts/Humanities			
COM* K173°	Public Speaking	3	
ECN* K102°	Principles of Microeconomics		
ENG* K101°	Composition	3	
ENG* K202°	Technical Writing	3	
HIS* K	History Elective	3	
PHL* K111°	Éthics '	3	
	Fine Arts Elective	3 3 3 3 3 3 3 3	
	GEO* or POL* Elective	3	
	PSY* or SOC* Elective	3	
	TOTAL	27	
Math and Science Core			
CHE* K121°	General Chemistry I	4	
MAT* K186°	Precalculus	4	
PHY* K121°	General Physics I	4	
	TOTAL	12	
Specialized Core			
BIO* K121°	General Biology I	4	
BIO* K122°	General Biology II	4	
PHY* K122°	General Physics II	4	
	TOTAL	12	
Options: Please choose from the following specialized electives; BIO* K235,			

Options: Please choose from the following specialized electives; BIO\* K235, BIO\* K260 or K262, BIO\* K264(Molecular and Cellular Biology), CHE\* K122, CHE\* K217, CHE\* K218, MAT\* K254 TOTAL Grand Total

16 67

° Course has a prerequisite. Students should check course description.

#### Technology Studies, Biomolecular Science Option, Associate in Science Degree Program Outcomes

In addition to the outcomes listed for the Technology Studies degree, students who complete the Biomolecular Science Option will be able to achieve the following outcomes: 1. understand and apply the scientific method.

2. comprehend and apply basic techniques of scientific investigation.

3. complete laboratory analyses, compile data, and construct technical reports.

4. understand the classifications of organisms in the six king-doms.

5. complete a systematic study of human anatomy and physiology.

6. understand and apply the principles of microbiology.7. understand and the principles and implications of genetics and research.

### Technology Studies: Computer Aided Drafting Option

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven. The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

#### **ASSOCIATE DEGREE**

Contact: Patrick Knowles- 860-215-9445

Computer Aided Drafting and Design is a technology that is reliant upon basic drafting technologies that have emerged with technological advances in the computer world. The proposed CADD Engineering Associate Degree supports Three Rivers Community College's purpose and mission.: The mission of Three Rivers Community College is to :"Meet the diverse educational needs of the community by creating an environment that stimulates learning. The college provides educational opportunities that are affordable and accessible. Additionally, Three Rivers develops regional partnerships and initiatives that contribute to the educational, economic, and cultural growth of Southeastern Connecticut." The curriculum for the CADD Engineering Associate Degree is structured to prepare individuals for positions as Drafters and Designers.

#### COMPUTER AIDED DRAFTING OPTION CURRICULUM

Course ID GENERAL EDUCATIOI		Credits
Arts/Humanities		
COM* K173°	Public Speaking	3
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3
	Fine Arts Elective	ິ ດີ ດີ ດີ ດີ ດີ
	Philosophy Elective	3
Math and Science Co		
CHE* K111°	Concepts of Chemistry	
or	or	4
CHE* K121°	General Chemistry I	•
MAT* K167°	Principles of Statistics	3
MAT* K186°	Precalculus	4
PHY* K114°	Mechanics	4
Social/Behavioral Sc		•
	Behavioral Sciences Elective	
	(psychology or sociology)	3
	Social Science Elective (economics	U
	or history recommended)	3
	Social Science Elective (geography,	U
	political science or history recommended)	3
	Social Science Elective (economics recommended)	-
Specialized Core	Social Science Liective (economics recommende	5u/J
CAD* K106	Computer-Aided Drafting	1
CAD* K100 CAD* K107	Computer-Aided Drafting Lab	2
CAD K107 CSA* K105	Introduction to Software Applications or higher	
MEC* K114°	Statics	3
	Siulics	3
Option Courses:	Industrial CAD and Lab	ŋ
CAD* K130/K131°		3
CAD* K202/K203°	Advanced CAD Topics and Lab	3 3
CAD* K250/K251°	CAD 3D Parametric Modeling and Lab	
MEC* K152/K153°	Fundamentals of Engineering Graphics and La	
MFG* K239°	Geometric Dimensioning and Tolerancing	3
	GRAND TOTAL	66

° Course has a prerequisite. Students should check course description. Note: Students should be familiar with the latest CAD release within two years of graduation. CAD\* K111 may be used for this purpose.

#### Technology Studies, CAD Option,

Associate in Science Degree Program Outcomes Upon successful completion of all program requirements, graduates will be able to:

1. become proficient in the use of Computer-Aided drafting Software.

2. have a thorough knowledge and expertise in multiple CAD programs, to include but not limited to AutoCAD, Inventor, Revit and Master Cam.

3. demonstrate knowledge of drafting standards set forth by the American National Standards Institute (ANSI).

4. demonstrate knowledge of drafting standards set forth by the International Standards Organization (ISO).

5. provide a general understanding of standard drafting principles such as alphabet of lines, precedence of lines, dimensioning standards and projection techniques.

6. apply appropriate mathematical and scientific principles to solve problems utilizing a CAD program, particularly descriptive geometry.

7. demonstrate the ability to develop an engineering concept

through detail and assembly drafting techniques to produce professionally finished engineering drawings suitable for use in industry.

8. demonstrate a thorough knowledge in the use of 3-D Parametric Modeling packages, such as Inventor and Revit. 9. readily adapt the necessary skills required for an entry-level position in the discipline of drafting. 10. provide an education that integrates a core curriculum with drafting theory, computer theory, technical background, and practice elements, for students who will seek advanced degrees. 11. expand life long learning opportunities in the drafting area for those with previous experience in other fields. 12. demonstrate and apply skills necessary for visual thinking and graphic problem solving. 13. work cooperatively and productively in groups to solve problems. 14. foster a learning environment that emulates industrial standards. 15. demonstrate working knowledge to translate engineering sketches into accurate scaled drawings. 16. be able to implement engineering change orders. 17. be able to plan methods and processes of production. 18. be able to select and demonstrate the appropriate characteristics of a particular material. 19. demonstrate a working knowledge of the use of Geometric Dimensioning and Tolerancing (GDT) techniques used in industry.

20. become efficient with the use of ISO 9000 standards as they relate to the Drafting and Design field.

#### Computer-Aided Drafting Certificate Program

#### **Certificate Program**

Contact: Patrick Knowles- 860-215-9445

This Computer-Aided Drafting (CAD) one-year certificate program prepares students with modern skills in drafting. There is a strong emphasis on computer applications in each drafting concentration. A unique feature of this certificate is that it pairs drafting with a technology such as Architectural, Civil, Electrical, Mechanical, or Industrial (Manufacturing, Mechanical). This provides a more meaningful education for the students. Students may complete this certificate and go to work as draftspersons or they may enter into an associate degree program of their choice with no less credit. Students may complete this certificate by completing the course that are listed below.

#### COMPUTER AIDED DRAFTING CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
SEMESTER I		
CAD* K106	Computer-Aided Drafting	1
CAD* K107	Computer-Aided Drafting Lab	2
CSA* K105	Introduction to Software Applications or higher	r 3
ENG* K101°	Composition	3
	Technical Elective/Lab#	3-4
	TOTAL	12-13
SEMESTER II		
CAD* K202/K203°	CAD: Advanced Topics and Lab	3
CAD* K214/K215°	CAD Construction and Lab	
or	or	3
CAD* K250/K251°	CAD 3D Parametric Modeling and Lab	
ENG* K202°	Technical Writing	3
MAT* K137°	Intermediate Algebra or higher	3
	TOTAL	12
	GRAND TOTAL	24-25
0 <b>C</b>		

° Course has a prerequisite. Students should check course description.

# Tech elective requires approval of the Program Advisor. Recommended choices include CAD\* K130/131, MEC\* K150/151 or ARC\* K135/135L.

#### **Computer-Aided Drafting, Certificate Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. become proficient in the use of Computer-Aided Drafting Software.

2. demonstrate knowledge of drafting standards set forth by the American National Standards Institute (ANSI).

3. demonstrate knowledge of drafting standards set forth by the International Standards Organization (ISO).

4. provide a general understanding of standard drafting principles such as alphabet of lines, precedence of lines, dimensioning standards and projection techniques.

5. readily adapt the necessary skills required for an entry-level position in the discipline of drafting.

6. provide an education that integrates a core curriculum with drafting theory, computer theory, technical background, and practice elements, for students who will seek advanced degrees.

 7. expand life long learning opportunities in the drafting area for those with previous experience in other fields.
 8. demonstrate and apply skills necessary for visual thinking and graphic problem solving.

9. work cooperatively and productively in groups to solve problems.

10. foster a learning environment that emulates industrial standards.

#### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

#### **Technology Studies: Electrical Option**

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two disti nct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven.

The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

#### **Associate in Science**

Contact: Patrick Knowles- 860-215-9445

The College of Technology - Electrical Option pathway offers a core of courses that will provide the foundation for the Bachelor of Science degree in Electrical Engineering Technology at Central Connecticut State University. Continuation requirements include a minimum grade of "C" and 67 credits as listed below.

Offered in conjunction with other Connecticut Community Colleges, this program provides an opportunity for individuals who have completed the apprenticeship training program available through the Independent Electrical Contractors of Connecticut to receive credit for their Electrical Contractors Certificate. Upon completion of the training program, students will receive 12 credits toward fulfillment of the 67 credits required for a degree in the Technology Studies Pathway Program. Upon graduation, students may choose to transfer to Central Connecticut State University, where their credits will be accepted into the Industrial Technology bachelors degree program.

#### ELECTRICAL OPTION CURRICULUM

Course ID	Title of Course	Credits
<b>GENERAL EDUCAT</b>	FION:	
Arts/Humanities		
COM* K173°	Public Speaking	3
ENG* K101°	Composition	3
	Fine Arts Elective (art or music)	3
Humanities Electi	ves	
(art history, forei	6	

Science		
CHE* K111°	Concepts of Chemistry	4
PHY* K114°	Mechanics	4
Mathematics		
MAT* K137°	Intermediate Algebra	3
MAT* K167°	Principles of Statistics	3
MAT* K186°	Precalculus	4
Social/Behavioral Sc	iences	
	Behavioral Sciences Elective	
	(psychology or sociology)	3
	Social Science Elective	
	(anthropology, economics geography,	
	government, history)	3
SOS* K2	Technology and Society	3
Specialized Core		
CAD* K106	Computer-Aided Drafting	1
CAD* K107	Computer-Aided Drafting Lab	2
CSA* K105	Introduction to Software Applications	3
MEC* K262°	Materials of Science	3
MEC* K263°	Materials of Science Lab	1
MEC* K241°	Thermodynamics	3
	Certification: Independent Electrical Contractors	12
	GRAND TOTAL	67

° Course has a prerequisite. Students should check course description.

#### Technology Studies, Electrical Option, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. transition seamlessly into a Bachelor of Science Degree program in Technology with junior level status in the receiving institution as part of the Technological Studies Pathway Program.

2. demonstrate team-oriented skills that permit effective participation in multicultural work and social environments. apply appropriate mathematical and scientific principles to

3. industrial technology applications.

4. perform competently in mathematics.

5. express ideas effectively through written and oral communications.

6. demonstrate proficiency in technical fundamentals to analyze industrial technology problems and make appropriate decisions.

7. maintain a practical knowledge of state-of-the-art hardware and software.

 apply skills and knowledge to effectively and efficiently plan, organize, implement, measure and manage technology.
 demonstrate a thorough knowledge and understanding of engineering graphics as well as conventional drafting practices, such as orthographic and isometric projection, section, detail, auxiliary views, descriptive geometry, as well as geometric dimensioning and tolerancing basics.

10. demonstrate a high level of proficiency in the use of stateof-the-art computer aided design (CAD) software and be able to respond positively to continuous software revisions and upgrades.

#### Technology Studies: Engineering Technology Option

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven.

The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

#### **Associate in Science**

Contact: Patrick Knowles- 860-215-9445

The Engineering Technology option to the Technology Studies associate degree program provides rigorous preparation and the specific coursework students need to pursue a B.S. degree in Engineering Technology at Central Connecticut State University. The courses for this option were also approved by the CCSU for articulation into their B.S. in Industrial Technology programs.

A minimum course grade of "C" is required in all courses below for continuing at CCSU's School of Engineering and Technology.

#### ENGINEERING TECHNOLOGY OPTION CURRICULUM

Course ID	Title of Course	Credits
GENERAL EDUCATIO	N:	
Arts/Humanities		
COM* K173°	Public Speaking	3
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3 3 3 3
	Fine Arts Elective (art or music)	3
	Philosophy Elective	3
Math and Science		
CHE* K121°	General Chemistry I	4
MAT* K167°	Principles of Statistics	3
MAT* K186°	Precalculus	4
PHY* K114°	Mechanics	
or	or	4
PHY* K221°	Calculus Based Physics I	
Social/Behavioral S	ciences	
	Behavioral Sciences Elective	
	(psychology or sociology)	3
	Social Science Elective	
	(economics or history recommended)	3
	Social Science Elective	
	(geography, political science or	
	history recommended)	3
	Social Science Elective	
	(economics recommended)	3
	•	

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Specialized Core		
MEC* K150/K151	Solid Modeling I and Lab	3
EGR* K211°	Engineering Statics	3
	Directed Elective	3
Option Courses		
PHY* K105°	Heat Sound Light	
or	or	
PHY* K222°	Calculus-Based Physics II	4
or	or	
CHE* K122°	General Chemistry	
MAT* K254°	Calculus I	4
MAT* K256°	Calculus II	4
	Technical Elective	3
	GRAND TOTAL	66
° Courso bas a pr	oroquisita. Students should check course	

° Course has a prerequisite. Students should check course description.

#### Technology Studies, Engineering Technology Option, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. enter a Bachelor of Science Program in Engineering Technology with junior level status in the receiving institution as part of the Technology Studies Pathway Program.

2. demonstrate team-oriented skills that permit effective participation in multicultural work and social environments

3. apply appropriate mathematical and scientific principles to engineering technology applications.

4. perform competently in mathematics.

5. express ideas effectively through written and oral communications.

6. demonstrate proficiency in technical fundamentals to analyze engineering technology problems and make appropriate decisions.

7. maintain a practical knowledge of state-of-the-art hardware and software.

8. apply skills and knowledge to effectively and efficiently plan, organize, implement, measure and manage technology.

9. demonstrate a thorough knowledge and understanding of engineering graphics as well as conventional drafting practices, such as orthographic and isometric projection, section, detail, auxiliary views, descriptive geometry, as well as geometric dimensioning and tolerancing basics.

10. demonstrate a high level of proficiency in the use of stateof-the-art computer aided design (CAD) software and be able to respond positively to continuous software revisions and upgrades.

#### Technology Studies: Lean Manufacturing and Supply Chain Management Option

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven,

The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

#### **Associate in Science**

Contact: Patrick Knowles- 860-215-9445

The Technology Studies Lean Manufacturing and Supply Chain Management Option was created in response to the expressed future and current needs of the manufacturing community. The U.S. Department of Labor along with local industry has demonstrated a demand and need for courses in the areas of lean and supply chain management.

The courses within this plan of study were developed by members of the College of Technology in conjunction with industry partners. The courses in lean are intended to ensure students have knowledge of current continuous process of improvement methodologies in use today within competitive manufacturing environments. The courses in supply chain management are intended to review the lean manufacturing principles needed to understand and maintain the supply chain and to cover the benefits and elements needed for implementing supply chain management.

This degree program provides students with the skills that will increase their employability in the field as well as set them on a path that will enable them to further their education

#### LEAN MANUFACTURING AND SUPPLY CHAIN MANANGE-MENT OPTION CURRICULUM

Course ID	Title of Course	Credits
GENERAL EDUCATIO	IN CORE	
COM* K173°	Public Speaking	3
ECN* K	Economics Elective	3
ECN* K	Economics Elective	
or	or	3
HIS* K	History Elective	
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3
HIS* K	History Elective	
or	or	
GEO* K	Geography Elective	3
or	or	
POL* K	Political Science Elective	

	PHL* K111°	Ethics	
	or	or	3
	PHL* K	Philosophy Elective	
	PSY* K	Psychology Elective	
	or	or	3
	SOC* K	Sociology Elective	
		Fine Arts Elective	3
		TOTAL	27
	Science and Math Cor	re	
	CHE* K111°	Concepts Chemistry	
1	or	or	4
	CHE* K121°	General Chemistry I	
	MAT* K167°	Principles of Statistics	3
	MAT* K186°	Precalculus	4
1	PHY* K110°	Introduction to Physics	
	or	or	4
	PHY* K121°	General Physics I	
		TOTAL	15
	Technology/Manager	ment Core	
		Technical Drafting or CAD	3
		Directed Elective	3
		Directed Elective	3
		TOTAL	9
	Courses in Option		
	MFG* K171	Introduction to Lean Manufacturing	3
	MFG* K172	Introduction to Lean Supply Chain Management	3
	MFG* K271°	Advanced Lean Manufacturing	3
	MFG* K272°	Implementing Lean Supply Chain Management	3
		TOTAL	12
		GRAND TOTAL	63
	° Course has a pre	erequisite. Students should check course	

° Course has a prerequisite. Students should check course description.

#### Lean Manufacturing Certificate Program

#### **Certificate Program**

Contact: Patrick Knowles- 860-215-9445

This Lean Manufacturing Certificate was developed as a response to the expressed future and current needs of the manufacturing community. The U.S. Department of Labor along with local industry has demonstrated a demand and need for courses in the areas of lean management. This certificate provides students with the skills that will increase their employability in the manufacturing field as well as set them on a path that will enable them to further their education. Students may complete this certificate by completing the courses that are listed below.

#### LEAN MANUFACTURING CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
MFG* K171	Introduction to Lean Manufacturing	3
MFG* K271°	Advanced Lean Manufacturing	3
	GRAND TOTAL	6
° Course has pre	erequisite. Students should check course	2

description.

#### Supply Chain Management Certificate Program

#### **Certificate Program**

Program Coordinator: Patrick Knowles- 860-215-9445

The Supply Chain Management Certificate was developed as a response to the expressed future and current needs of the manufacturing community. The U.S. Department of Labor along with local industry has demonstrated a demand and need for courses in supply chain management. This certificate provides students with the skills that will increase their employability in the manufacturing field as well as set them on a path that will enable them to further their education.

Students may complete this certificate by completing the courses that are listed below.

#### SUPPLY CHAIN MANAGEMENT CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
MFG* K172°	Introduction to Lean Supply Chain Management	3
MFG* K272°	Implementation Lean Supply Chain Managemen	it 3
GRAND TOTAL	6	
° Course has a pre	erequisite. Students should check course	ذ
description.		

#### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

## **Technology Studies**

#### Technology Studies: Technology and Engineering Education Option

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies.

After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven.

#### The Associate in Science

Contact: Patrick Knowles- 860-215-9445

The Technology and Engineering Education option to the Technology studies associate degree program provides specific course work students need to pursue a B.S. degree in Technology and Engineering Education at Central Connecticut State University. The courses for this option were also approved by CCSU for articulation into their B.S. in Industrial Technology.

A minimum course grade of "C" is required in all courses below for continuing at CCSU's School of Engineering and Technology.

## TECHNOLOGY AND ENGINEERING EDUCATION OPTION CURRICULUM

Course ID	Title of Course	Credits
GENERAL EDUCATIO	N:	
Arts/Humanities		
COM* K173°	Public Speaking	3
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3
	Fine Arts Elective	3 3 3 3
	Philosophy Elective	3
Science and Math Co		
CHE* K111°	Concepts Chemistry	4
MAT* K167°	Principles of Statistics	3
MAT* K186°	Precalculus	4
РНҮ* K114°	Mechanics	4
Social/Behavioral Sc	tiences	
,	Behavioral Sciences Elective	
	(psychology or sociology)	3
	Social Science Elective	
	(economics or history recommended)	3
	Social Science Elective (geography,	
	political science or history recommended)	3
	Social Sciences Elective (economics recommended	d) 3
Specialized Core		., -
CAD* K106/K107	Computer Aided Drafting with Lab	3
MFG* K102/K103	Manufacturing Processes with Lab	4
TCN* K105	Laser and Lab Safety	1
	Directed Elective	3

#### Courses in Option EET\* K105/K106°

MEC\* K114°

Electric Circuits and Systems with Lab Statics

MEC\* K250/K252° Strength of Materials with Lab MEC\* K262/K263° Materials Science with Lab GRAND TOTAI



4

3

4

4

68

° Course has a prerequisite. Students should check course description.

#### Technology Studies, Technology and Engineering Education Option, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

enter a Bachelor of Science Program in Technology Education with junior level status in the receiving institution as part of the Technology Studies Pathway Program.

demonstrate team-oriented skills that permit effective participation in multicultural work and social environments. apply appropriate mathematical and scientific principles to

industrial technology applications. perform competently in mathematics.

express ideas effectively through written and oral communications.

demonstrate proficiency in technical fundamentals to analyze industrial technology problems and make appropriate decisions.

maintain a practical knowledge of state-of-the-art hardware and software.

apply skills and knowledge to effectively and efficiently plan, organize, implement, measure and manage technology. demonstrate a thorough knowledge and understanding of engineering graphics as well as conventional drafting practices, such as orthographic and isometric projection, section, detail, auxiliary views, descriptive geometry, as well as geometric dimensioning and tolerancing basics.

demonstrate a high level of proficiency in the use of state-ofthe-art computer aided design (CAD) software and be able to respond positively to continuous software and revisions and upgrades.

#### **Technology Studies: Wastewater Option**

#### A College of Technology Pathway

The Connecticut College of Technology is an innovative program leading to a Bachelor of Science Degree in engineering or technology. The program consists of two distinct pathways, one in Engineering Science and one in Technology Studies. After completing the Technology Studies Pathway Program at Three Rivers, students may enter directly into technical fields at Central Connecticut State University or Charter Oak State College (Connecticut's External Degree Program). The Engineering Science Pathway leads directly into the School of Engineering at the University of Connecticut or the University of New Haven.

The pathway courses will transfer to engineering and technology programs at many other public and private universities as well.

#### **Associate in Science**

Contact: Diba Khan-Bureau- 860-215-9443

Capital, Gateway, Naugatuck Valley, Northwestern Connecticut, Three Rivers and Tunxis Community Colleges offer the following option to provide a focus for students who desire to concentrate their attention on Wastewater.

Aspiring and current wastewater treatment plant employees are provided an opportunity to prepare for certification examinations, and to qualify for employment and advancement. Students who complete the Wastewater Option for the Technological Studies Pathway Degree program may choose to transfer to Central Connecticut State University, where their credits will be accepted into the Industrial Technology bachelor's degree program. Please check current course schedule for details. Specific courses identified for electives are suggested to ensure transferability. Courses for this consortium-based program will be offered at various Connecticut Community Colleges.

At Three Rivers, the following courses will be required:

#### WASTEWATER OPTION CURRICULUM

Course ID GENERAL EDUCATIO Arts/Humanities	Title of Course N:	Credits	
COM* K173°	Public Speaking	3	
ENG* K101°	Composition	3	
ENG* K202°	Technical Writing	3	
	Fine Arts Elective (art or music)	3	
	Philosophy Elective	3	
Science and Math Co	pre		
<b>CHE* K111°</b>	Concepts Chemistry		
or	or	4	
CHE* K121°	General Chemistry I		
MAT* K137°	Intermediate Algebra	3	
MAT* K186°	Precalculus	4	
PHY* K114°	Mechanics	4	
Social/Behavioral Sciences			
	Behavioral Sciences Elective		
	(psychology or sociology)	3	

	Social Science Elective	
	(economics or history recommended)	3
	Social Science Elective ( geography, political scie	ence or
	history recommended)	3
	Social Sciences Elective	
	(economics recommended)	3
Specialized Core		
CAD* K106/K107	Computer Aided Drafting with Lab	3
CSA* K105	Introduction to Software Applications or higher	3
MAT* K167°	Principles of Statistics	3
	Technical Elective	3
Courses in Option		
WWT* K110 <sup>°</sup>	Wastewater I	3
WWT* K112°	Wastewater II	3
WWT* K114°	Wastewater III	3
WWT* K116°	Wasterwater IV	3
	GRAND TOTAL	66

° Course has a prerequisite. Students should check course description.

## Technology Studies, Wastewater Option, Associate in Science Degree Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

apply principles of wastewater treatment processes by using specific examples from wastewater treatment laboratories.
 explain safe and effective operation of wastewater treatment facilities, including grit removal, disinfection, and chlorination.

 describe maintenance of wastewater treatment facilities to include safety, housekeeping and laboratory procedures. become certified Wastewater Class I, II, III and IV Operators.
 report on-site visits to municipal facilities and prepare a comprehensive study of a wastewater treatment plant.
 use computers to acquire, analyze and report data.
 communicate effectively in speech and in writing.
 use mathematics to solve problems related to chemistry and wastewater treatment.

## Technology Studies

#### Wastewater Certificate Program

#### Certificate Program

Contact: Diba Khan-Bureau- 860-215-9443

Wastewater treatment plant employees are prepared for the Wastewater Operator I and Wastewater Operator II certification examinations. All credits earned in this certificate are applicable towards the Technology Studies Associate degree. Students may complete this certificate by completing the courses that are listed below.

#### WASTEWATER CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
English ENG* K101°	Composition	3
Science		
BIO* K121°	General Biology I	4
<b>CHE* K111°</b>	Concepts of Chemistry	4
Mathematics		
MAT* K137°	Intermediate Algebra	3
Specialized Core		
CSA* K105	Intro to Software Applications	3
Options #		
WWT* K110°	Wastewater I	3
WWT* K112°	Wastewater II	3
WWT* K114°	Wastewater III	3 3 3 3
WWT* K116°	Wastewater IV	3
	GRAND TOTAL	29

° Course has a prerequisite. Students should check course description.

# Courses for this consortium-based program will be offered at various Connecticut Community Colleges

#### College of Technology: Wastewater Option, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

apply principles of wastewater treatment processes by using specific examples from wastewater treatment laboratories.
 explain safe and effective operation of wastewater treatment facilities, including grit removal, disinfection, and chlorination.

 describe maintenance of wastewater treatment facilities to including safety, housekeeping and laboratory procedures.
 become certified Wastewater Class I and Class II Operators. report on site visits to municipal facilities and prepare a comprehensive study of a wastewater treatment plant.

5. use computers to acquire, analyze and report data. communicate effectively in speech and writing.

6. use mathematics to solve problems related to chemistry and wastewater treatment.

#### IN MANY CASES, THE COURSEWORK WITHIN A CERTIFICATE PROGRAM IS APPLICABLE TO AN ASSOCIATE DEGREE PROGRAM FOR A PARTICULAR FIELD OF STUDY

#### Wastewater Advanced Certificate Program

#### **Certificate Program**

Contact: Diba Khan-Bureau- 860-215-9443

Wastewater treatment plant employees are prepared for the Wastewater Operator III and Wastewater Operator IV certification examinations. All credits earned in this certificate are applicable towards the Technology Studies Associate degree. Students may complete this certificate by completing the courses that are listed below.

English Competency Requirement met by: \_

#### WASTEWATER CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
Mathematics		
MAT* K186°	Precalculus	4
Social/Behavioral So	tiences	
PSY* K111°	General Psychology I	3
Specialized Core		
+	Fundamentals of Electricity	4
Options #		
+	Sanitary Engineering	
or	or	
+	Environmental Engineering	3
or	or	
	Technology Elective	
+	Environmental Law	3
+	Advanced Wastewater I	3
+	Advanced Wastewater II	3 3 3 3
##	Directed Elective	3
	Directed Elective	3
	GRAND TOTAL	29
		_,

° Course has a prerequisite. Students should check course description.

+ Courses for this consortium-based program will be offered at various Connecticut Community Colleges.

## To be chosen with the consent of a faculty advisor. The English Competency Requirement is met by placement into ENG\* K101, or transfer credit, or completion of ENG\* K096.

#### Advanced Wastewater, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

 apply principles of wastewater treatment process by using specific examples from wastewater treatment laboratories.
 explain safe and effective operation of wastewater treatment facilities, including grit removal, disinfection, and chlorination.

 describe maintenance of wastewater treatment facilities, to including safety, housekeeping, and laboratory procedures.
 become certified Wastewater Class III and Class IV Operators.

- 5. use computers to acquire, analyze and report data.
- 6. communicate effectively in speech and writing.

7. use mathematics to solve problems related to chemistry and wastewater treatment and to present numerical data in the form of charts and graphs.



#### **Technical Writing Certificate Program**

#### **Certificate Program**

Program Contact: Christine Hammond - 860-215-9434

This 21 credit program is designed to provide students with an opportunity to improve their writing skills. Students may complete this certificate by completing the courses that are listed below.

#### TECHNICAL WRITING CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
COM* K173°	Public Speaking	3
ENG* K101°	Composition	3
ENG* K202°	Technical Writing	3
ENG* K208°	Introduction to English as a Language	3
GRA* K140°	Publication Design	3
	Restricted Elective (see below)	3
	Restricted Elective (see below)	3
	GRAND TOTAL	21

° Course has a prerequisite. Students should check course description. Restricted Electives: ENG\* K102, ENG\* K200, COM\* K121, COM\* K291, COM\* K292, CSA\* K205, CST\* K153, GRA\* K155, GRA\* K230, GRA\* K260, GRA\* K296.

#### Technical Writing, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

- 1. sharpen writing and critical thinking skills.
- 2. develop a writing portfolio.
- 3. adapt writing for different audiences.
- 4. improve chances for employment and promotion.



# Visual Fine Arts and Arts

#### **Visual Fine Arts**

#### **Associate in Arts**

Program Coordinator: Sandra Jeknavorian - 860-215-9439

This 60-61 credit program is designed to provide both a strong basic foundation in the visual arts and a broad background in general education. For those students seeking a professional career, the Visual Fine Arts Program offers a transfer-oriented course of studies that leads to enrollment in an art school or other baccalaureate institution. Careers in commercial art, art education and fine arts are open to graduates with bachelors degrees. This program allows students to pursue education and gain personal enjoyment through the creative learning process.

#### **VISUAL FINE ARTS CURRICULUM**

Course ID	Title of Course	Credits
SEMESTER I ART* K111	Drawing I	3
ART* K121	Two Dimensional Design	3
ART* K122	Three Dimensional Design	3
ENG* K101°	Composition	3
IDS K105	First Year Experience	3
	TOTAL	15
SEMESTER II	TURE	15
ART* K101°	Art History I	3
ART* K151°	Painting I	3
ART* K161	Ceramics I	3
COM* K173°	Public Speaking	3
GRA* K131	Digital Photography	3
	TOTAL	15
SEMESTER III	TOTAL	15
ART* K102°	Art History II	3
ART* K112°	Drawing II	3
ART* K288°	Portfolio Development I	3
GRA* K140°	Publication Design	3
MAT* K137°	Intermediate Algebra or higher	3
	TOTAL	15
SEMESTER IV		
ART* K152°	Painting II	
or	or	3
ART* K162°	Ceramics II	
	Art or Graphic Arts Elective	3
	Liberal Arts, Art or Graphics Elective	3
	Natural Science Elective	3-4
	Social Science Elective	3
	TOTAL	15-16
	GRAND TOTAL	60-61
0 0		

° Course has a prerequisite. Students should check course description.

#### Visual Fine Arts, Associate in Arts Degree Program Outcomes

Upon successful completion of all program requirements, students will be able to:

1. effectively utilize the fundamental elements and principles of two-dimensional and three-dimensional design, color,

composition, line, form, texture, pattern, value and space to arrange effective compositions and communicate ideas.

2. demonstrate the skills and techniques necessary for studio art including the ability to safely use materials, tools and equipment specific to various media.

3. demonstrate the ability to visually represent a conceptual idea.

4. demonstrate the ability to follow a creative project from conception to completion.

5. compile a comprehensive portfolio of work that reflects the breadth of their study and prepares them for transfer to a baccalaureate institution and knowledge of the process of presenting ones work to the public.

6. possess desirable work habits, critical thinking, creative problem solving, good aesthetic judgment, self reliance and self discipline.

7. be able to critique, speak and write about their own work and the visual arts of others using an informed visual vocabulary.8. demonstrate an understanding an appreciation of the relationship of works of art to the diversity of human culture, history and experience.



#### Graphic and Communication Arts Certificate Program

#### **Certificate Program**

Program Advisor: Kevin Amenta - 860-215-9402

This certificate is designed to allow students to take advantage of the tremendous demand for the media in southeastern Connecticut and along the eastern seaboard. Students' exposure to courses and experiences in this program will make them qualifies for media-related jobs, or will prepare them to create materials for private and public organizations. Students may complete this certificate by completing the courses that are listed below.

## GRAPHIC AND COMMUNICATIONS ARTS CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
BMK* K241°	Principles of Advertising	3
COM* K121°	Journalism	3
COM* K291°	Publications Practice I	3
ENG* K101°	Composition	3
GRA* K140°	Publication Design	3
GRA* K155°	Advertising Design	3
GRA* K230°	Digital Imaging I	3
GRA* K260°	Web Design	3
GRA* K296°	Graphic Design Internship	
or	or	3
	Open Elective	
	Open Elective	3
	GRAND TOTAL	30

° Course has a prerequisite. Students should check course description.

#### Graphic and Communication Arts, Certificate Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

- 1. write news and feature stories.
- 2. edit the work of others.

3. use Adobe Pagemaker, a page layout program, to produce newsletters, brochures, flyers, advertisements, and a multipage tabloid publication.

4. use Adobe Photoshop to edit images, design images, combine text with images and prepare images for the web. use Pagemaker, Photoshop and Multi-Ad creator to design and produce advertisements for print and the web.

#### **Women's Studies**

#### **Certificate Program**

Program Leader: Janet Hagen- 860-215-9433

This 24 credit certificate program prepares students who are interested in Women's Studies to transfer to 4-year institutions to pursue a major or minor in Women's Studies. The certificate is also designed for students who may be interested in working in various private or non-profit sectors. Potential jobs may include working in domestic violence or welfare rights advocacy, public and community service, non-profit organization work, family counseling, sexual assault counseling, health care, public policy work, human resources, teaching, law, and public relations. Students may complete this certificate by completing the courses that are listed below.

#### WOMEN'S STUDIES CERTIFICATE CURRICULUM

Course ID	Title of Course	Credits
ART* K204°	History of Women in the Arts	3
ENG* K101°	Composition	3
ENG* K102°	Literature and Composition	3
ENG* K261°	Women Writers Across Cultures	3
SOC* K103°	Social Problems	3
SOC* K211°	Sociology of Gender	3
SOC* K278°	Community Research	3
WMS* K105°	Gender in the Everyday World	3
	GRAND TOTAL	24

° Course has a prerequisite. Students should check course description.

#### Women's Studies, Certificate Program Outcomes

Upon successful completion of all program requirements graduates will be able to:

1. explain how women's positions are socially constructed through social identity locations (such as race/ethnicity, class, age, sexuality, abilities, etc.) and other social, cultural, and historical experiences and how these locations and experiences impact women's lives.

2. demonstrate strong written and oral communication skills by formulating and articulating ideas, developing positions, actively listening, and engaging in constructive dialogue on the topic of gender and women's issues.

3. identify and explain what career options and degree programs are available to women's studies major and minors.
4. demonstrate awareness of the importance of civic engagement by engaging in projects that promote the empowerment of women and girls.



#### **Key to Course/Department Prefixes**

	ACC*	Accounting
	ANT*	Anthropology
	ARC*	Architecture
	ART*	Art
	ASL*	American Sign Language
	AST*	Astronomy
	BBG*	Business - General
	BES*	Business - Entrepreneurship
	BFN*	Business - Finance
	BIO*	Biological Sciences
	BMG*	Business - Management
S 12	BMK*	Business - Marketing
×	CAD*	Computer-Aided Drafting
Ð	CHE*	Chemistry
<u> </u>	CHI*	Chinese
Ľ	CIV*	Civil Engineering Technology
Je	CJS*	Criminal Justice
5	COM*	Communication/Speech
ar	COU	Counseling
р С	CSA*	Computer Applications
<u>Ď</u>	CSC*	Computer Science
б С	CST*	Computer Technology
o course/ Department Prelixes	CTC*	Construction Technology
5 J	DNT*	Dental Hygiene
	EAS*	Earth Science
	ECE*	Early Childhood Education
с С	ECN*	Economics
<	EDU*	Education
	EET*	Electrical Engineering Technology
	EGR*	Engineering
	ENG*	English
	ENV*	Environmental Engineering Technology

GLG*	Geology	
GRA*	Graphic Design	
HIS*	History	
HLT*	Health Science	
HPE*	Health Physical Education	
HSE*	Human Services	
HSP*	Hospitality Management	
IDS	Interdisciplinary Studies	
LIB*	Library Science Technology	
MAT*	Mathematics	
MEC*	Mechanical Engineering Technology	
MED*	Medical	
MFG*	Manufacturing Engineering Technology	
MUS*	Music	
NUC*	Nuclear Engineering Technology	
NUR*	Nursing	
OCE*	Physical Science	
PHL*	Philosophy	
PHO*	Photonics Engineering Technology	
PHY*	Physics	
POL*	Political Science	
PSY*	Psychology	
RLS*	Recreation and Leisure Services	
SCI*	Science	
SOC*	Sociology	
SPA*	Spanish	
SSC*	Social Science	
TCN*	General Engineering Technology	
THR*	Theatre	
WMS*	Women's Studies	
WWT*	Wastewater	
* INDICATES COMMON COURSE NUMBERING		
$\infty$ Appropriate placement through multiple-measure		

Appropriate placement through multiple-measures assessment process.

ESL\*

FRE\*

FTA\*

GEO\*

GIS\*

French

Geography

English as a Second Language

Fire Technology & Administration

Geographic Information Systems

#### ACCOUNTING

#### ACC\* K100 3 CREDIT HOURS BASIC ACCOUNTING I

The course is designed to cover the basic structure, concepts, principles, and correct use of accounting terminology. The practical aspect of accounting is emphasized through recording, classifying, and summarizing the financial information that flows within a business enterprise. The accounting cycle is examined along with such areas as sales, purchases, cash, receivables, and payroll. This course is not open to students who have completed ACC\* K111 or higher.

#### ACC\* K110 3 CREDIT HOURS INTRODUCTION TO FORENSIC ACCOUNTING

An introductory course in Forensic Accounting designed to provide students with the investigative tools, evidentiary requirements, litigation support and overview of the accounting and legal aspects of fraud including but not limited to fraud perpetrated against individuals and organizations (asset misappropriation), which includes employee theft, vender fraud, money laundering, customer fraud and management fraud with respect to the Sarbanes-Oxley Act.

#### ACC\* K111 (formerly ACC K111) 4 CREDIT HOURS PRINCIPLES OF ACCOUNTING I

Prerequisites: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.  $\infty$ ; MAT\* K095 or MAT\* K0951 with a "C#" grade or better. This course is designed to cover basic accounting theory and practice as applied to the complete accounting cycle, including the use of current accounting systems and procedures and the preparation of financial statements. Computer lab time may be required for this course.

#### ACC\* K112 (formerly ACC K112) 4 CREDIT HOURS PRINCIPLES OF ACCOUNTING II

Prerequisite: ACC\* K111.

This course is a continuation of the study of accounting theory and practice. Introduction to partnerships, corporations, managerial accounting, and analysis of financial statements. Computer lab time may be required for this course.

#### ACC\* K118 (formerly ACC K231) 4 CREDIT HOURS MANAGERIAL ACCOUNTING

Prerequisite: ACC\* K111 with a "C" grade or better.

This course is designed to cover the application of accounting principles and procedures to the cost control function of manufacturing business management. Emphasis is placed on managerial analysis and control, job order costing, process cost, standard cost, and variance analysis.

#### ACC\* K125 (formerly ACC K150) 3 CREDIT HOURS ACCOUNTING COMPUTER APPLICATIONS I

Prerequisite: ACC\* K112. This course is designed to teach accounting students about computerized integrated accounting and accounting spreadsheet applications using a standard Windows interface. Students will learn to operate the software by entering realistic accounting transactions for a variety of business applications and by generating financial statements, spreadsheets, and other management information reports. The techniques and terminology learned can be applied to other Window-based software packages.

#### ACC\* K233 4 CREDIT HOURS PRINCIPLES OF COST ACCOUNTING Prerequisite: ACC\* K112.

This course encompasses fundamental principles and procedures needed for planning, evaluating, and controlling the organization's internal activities. Students will be exposed to accounting systems that are designed to provide information for managers as they relate to decision making. Topics include: budgeting, relevant costing, absorption and direct costing models, production levels, and inventory evaluations. Students work with accounting information that includes job-order costing, process costing, and standard costs.

#### ACC\* K241 (formerly ACC K233) 3 CREDIT HOURS FEDERAL TAXES I

Prerequisites: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better; MAT\* K123 or MAT\* K146 or MAT\* K167 or MAT\* K172 or MAT\* K186.

This course examines federal income taxation as it relates to individuals. Emphasis is on tax law, researching tax questions, the determination of taxable income, deductions, and the preparation of tax returns.

#### ACC\* K271 (formerly ACC K211) 3 CREDIT HOURS I NTERMEDIATE ACCOUNTING I

Prerequisite: ACC\* K112. In this course, students will engage in an intensive study of financial accounting theory, focusing on revenue and expense recognition and the valuation and disclosure of financial statement elements.

#### ACC\* K272 3 CREDIT HOURS I NTERMEDIATE ACCOUNTING II

Prerequisite: ACC\* K271.

In this course, students will engage in an intensive study of financial accounting theory focusing on inventory, fixed and intangible assets, as well as liabilities and the impact on Equity.

#### ACC\* K292 3 CREDIT HOURS PRACTICUM IN ACCOUNTING

Prerequisite: Permission of the program coordinator.

This course is based on on-the-job placement∞ in a business setting. This is a college-supervised experience based on a learning contract with evaluations by both the college faculty and the staff of the cooperating business.

#### **ANTHROPOLOGY**

#### ANT\* K101 (formerly ANT K121) 3 CREDIT HOURS

INTRODUCTION TO ANTHROPOLOGY

Prerequisites:  $ENG^* K101$  or  $ENG^* K101S$ placement $\infty$  or completion of  $ENG^* K096$ with a "C#" grade or better.

This course will approach the evolution of human beings from the perspectives of the four anthropology subfields (cultural, physical, archaeology, linguistics). The dawn of humanity will be traced from its early primate origins to the evolution of family, language, consciousness, and culture. Cultural evolution will trace the origins of bands, tribes, and state civilizations. The course will conclude with an examination of human variation.

#### ANT\* K105 (formerly ANT K122) 3 CREDIT HOURS INTRODUCTION TO CULTURAL ANTHROPOLOGY

Prerequisites: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course examines human life ways. Examples will be drawn cross-culturally to illustrate universal aspects of cultural life, such as marriage and family, art and religion, ecology and economy, and power and politics. Explanations for the





existence of various kinds of human societies such as bands, tribes, and modern states will be addressed with a humanistic concern on how people view and experience life within them. Contemporary problems of cultural contact and change will be discussed with the objective of discovering ways and means of promoting intercultural understanding. Course fulfills International/Intercultural Requirement.

#### ANT\* K136 3 CREDIT HOURS MUSIC CULTURES OF THE WORLD

Prerequisites: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. A comparative survey of musical concepts, style, and performance practices of various world cultures. Course content will emphasize the context of musical expression within the different cultures examined. This course is equivalent to MUS\* K104. Course fulfills International/ Intercultural Requirement.

#### ANT\* K230 3 CREDIT HOURS INDIGENOUS PEOPLES OF THE WORLD

Prerequisites: ENG\* K101 or ENG\* K101S and any 100-level social science course; or permission of the instructor. This course examines the historical and cultural experiences of indigenous peoples from around the world. The main objective is to gain a better understanding of the impact that modernization and

globalization has had on the development of these cultures through an investigation of select groups from areas such as (but not limited to) Australia, Sub-Saharan Africa, and the Americas. The course will use studies from cultural anthropology, archaeology, linguistics, and ethnomusicology to increase students' exposure to alternative means for living in and understanding the world. A significant amount of writing and a major research project will be required. Course fulfills International/Intercultural Requirement.

#### ANT\* K296 (formerly ANT K298) 3 CREDIT HOURS TEACHING ASSISTANTSHIP IN ANTHROPOLOGY

Prerequisite: At least two prior courses in anthropology and permission of the instructor. In this assistantship, students will assist a faculty member in conducting an academic course offered in the field of anthropology. Students may lead discussion groups, work with individual students, organize field trips, make presentations, and/or other work (to be arranged). Back to top

#### ARCHITECTURE

#### ARC\* K102 (formerly ARC K1100) 3 CREDIT HOURS ARCHITECTURE OF THE WORLD

The course offers a global perspective of buildings, their settings, and the dissemination of ideas about architecture from the late Neolithic period to the present. Particular attention is given to the relationships of architectural expression, meaning and building technology and to issues arising when architectural traditions of one culture are imposed upon or otherwise adapted by another. Students will explore the impact of climate, economy, philosophy, social structure and technology on architecture by becoming familiar with some of the world's major monuments in architectural history. The course also integrates the visual arts that paralleled each era, exploring the fundamental elements of each movement as illustrated through aesthetic expression.

#### ARC\* K108 (formerly ARC K1108) 3 CREDIT HOURS BUILDING MATERIALS

This course introduces students to the source, use and limitations of materials used in building construction, while exploring methods of assembly and historic applications. Emphasis is placed on basic design concepts and the practical applications of building materials "in the field." Field observation is attained through site visits of projects under construction (as available).

#### ARC\* K135 1 CREDIT HOUR CONSTRUCTION GRAPHICS

Corequisite: ARC\* K135L. This course introduces the fundamental concepts of drafting and working drawings for the construction industry, emphasizing set layout and sequencing, sheet image composition, drawing construction, line weights, conventions, symbols and projection. "Drafting" as a means to convey "design intent" and "constructability" to the construction industry is accomplished through the lab portion of this course by the execution of actual drawing types, including architectural, civil, structural, detail, and other drawings.

#### ARC\* K135L 2 CREDIT HOURS CONSTRUCTION GRAPHICS LAB

*Corequisite: ARC\* K135.* This course implements the principles of construction graphics covered in the lecture portion of this course and the execution of actual drawing types, including architectural, civil, structural, detail, and other drawings.

#### ARC\* K137 (formerly ARC K1200) 1 CREDIT HOUR ARCHITECTURAL DETAILING

Prerequisites: ARC\* K135/135L. Corequisite: ARC\* K137L. This course introduces the methods and purpose of producing architectural drawing details that convey design intent to the construction industry while illustrating, with detail, the materials, assemblies and methods to be used in construction.

#### ARC\* K137L (formerly K1201) 2 CREDIT HOURS

#### **ARCHITECTURAL DETAILING LAB** *Prerequisites: ARC\* K135/135L.*

Corequisite: ARC\* K137.

This course implements the principles of architectural detailing covered in the lecture portion of this course, as students gain working knowledge through construction observation, detail observation, and a hands-on scaled detail building project.

#### ARC\* K211 (formerly ARC K2100) 1 CREDIT HOUR ARCHITECTURE DESIGN I

ARCHITECTURE DESIGN

Prerequisites: ARC\* K137/137L. Corequisite: ARC\* K211L.

This course introduces the student to the fundamental methodologies of a designer's decision making process. Students will work individually and in groups as they apply their studies to the solutions of small "vignette" architectural projects that explore the principles of form, space, and order in design.

#### ARC\* K211L (formerly ARC K2101) 2 CREDIT HOURS ARCHITECTURE DESIGN I LAB

Prerequisites: ARC\* K137/137L. Corequisite: ARC\* K211.

This course implements the principles of architectural design covered in the lecture portion of this course. Emphasis in the Design I Lab is placed more upon the path of design and the decision making process than a "polished" design solution, through sketches, diagrams, and models.

#### ARC\* K213 (formerly ARC K2210) 1 CREDIT HOUR

#### **ARCHITECTURE DESIGN II** *Prerequisites: ARC\* K211/211L.*

*Corequisites:* ARC\* K213L. This course, along with Architectural Design I, forms the capstone of the Architectural program, as students continue implementing the principles of Design I. Students expand their design experience as they implement form, space, and order concepts in the design of building layouts, planning schemes, façade designs, and construction techniques.

#### ARC\* K213L (formerly ARC K2211) 2 CREDIT HOURS ARCHITECTURE DESIGN II LAB

Prerequisites: ARC\* K211/211L. Corequisite: ARC\* K213.

This course implements the principles of architectural design covered in the lecture portion of this course. Students transition from designing small "vignette" projects in Design I to larger - holistic design problems, including urban in-fill, single buildings, and planning projects.

#### ARC\* K214 3 CREDIT HOURS SUSTAINABLE DESIGN

This course explores sustainability in design, healthy design, renewable energy, cogeneration, recycling, low VOC, zero carbon, and LEED as they relate to regional and urban planning, building design, building envelope, building interior environment, site ecology, energy resources, and infrastructure and transportation.

#### ARC\* K221 (formerly ARC K1116) 3 CREDIT HOURS CONTRACTS & SPECIFICATIONS

This course introduces students to construction industry documents, including working drawings and the project manual which contains bidding documents, contract documents, contract conditions, and the specifications. Additional documents include cut sheets, shop drawings, and various AIA (American Institute of Architects) documents used in contract administration. Working knowledge is attained through actual execution of the documents.

#### ARC\* K225 3 CREDIT HOURS ALTERNATIVE BUILDING SYSTEMS

Prerequisite: ARC\* K108. Students will gain working knowledge of alternative building systems (students should have previous knowledge of traditional building systems). Areas covered include building siting, structural alternatives, envelope and weathering systems, industry-standard design and performance criteria (LEED & BPI), interior environmental quality, and mechanicalelectrical-plumbing systems. Students will demonstrate applied learning through case-study work.

#### ARC\* K227 (formerly ARC K2219) 3 CREDIT HOURS CODES & ORDINANCES

This course introduces students to the origins, scope, and administration of local, state, and federal codes and ordinances. Students will be exposed to the elements of these codes and ordinances and to the impacts they have on the design, construction and occupancy of a project. Students will develop a working knowledge of the subject material as they track a hypothetical project from preliminary zoning research, through design and construction and ultimately the issuance of a "certificate of occupancy."

#### ARC\* K241 (formerly ARC K2215) 2 CREDIT HOURS SITE ANALYSIS

Prerequisites: ARC\* K135/135L. Corequisite: ARC\* K241L. This course introduces students to an overview inventory of the systems and elements that are encountered in the analysis of site conditions. Students will explore how each element operates and what procedures are required to maintain or improve the quality of the site environment. Students will develop a value system, which fosters the concept of fitness to human purpose and specific site context through an ecological approach to design.

#### ARC\* K241L (formerly ARC K2216) 1.5 CREDIT HOURS SITE ANALYSIS LAB

Prerequisites: ARC\* K135/135L. Corequisite: ARC\* K241. This course implements the principles of site analysis covered in the lecture portion of this course, as students explore the relationship between land use and architectural design. Hands-on experience is gained through a final project that explores site selection, orientation, climatology, natural and cultural features, topography, and regulatory issues.

#### ARC\* K280 (formerly ARC K2220) 3 CREDIT HOURS PROFESSIONAL PRACTICE

This course introduces the student to the methodologies and philosophies of architectural office practice. Subjects covered include firm organization and management, client relations, marketing and attaining projects, and project production and management. Emphasis is placed on the everyday tasks of managing a firm and its projects. Working knowledge is attained through actual job files setup and execution of common AIA and other project management documents.

#### ARC\* K282 3 CREDIT HOURS TRENDS & ISSUES

A topics-based course that explores current and evolving subjects that affect the architectural and construction industries. Areas of focus will include changes in technologies; building materials; regulations, codes and ordinances; delivery methods; graphic mediums; and other evolving subjects.

#### ARC\* K296 (formerly ARC K2995) 3 CREDIT HOURS

**CO-OP EDUCATION WORK EXPERIENCE** *Prerequisite: Permission of the program* 

coordinator. Corequisite: Student must have completed all freshman level technology courses and

have a GPA of 2.50 or better. Students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry hours must be completed by the co-op student during the semester internship.

#### ART

#### ART\* K101 3 CREDIT HOURS ART HISTORY I

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course provides an introduction to the history of art from prehistoric through to the mid-15th century from a global perspective. Major works in many media including painting, sculpture, and architecture will be covered. By the end of this course, students will have a visual vocabulary with which they can intelligently discuss and write about works of art. Regardless of whether the work is accessible and easy to admire or difficult and not readily understood, students will understand how to evaluate works of art not only for their beauty, but for other intrinsic values such as power of expression and boldness of communication. Outside readings and papers required.

#### ART\* K102 3 CREDIT HOURS ART HISTORY II

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course provides an introduction to the history of art from the mid-15th



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century through to contemporary from a global perspective. Major works in many media including painting, sculpture, installation art, and performance art will be covered. By the end of this course, students will have a visual vocabulary with which they can intelligently discuss and write about works of art. Regardless of whether the work is accessible and easy to admire or difficult and not readily understood, students will understand how to evaluate works of art not only for their beauty, but for other intrinsic values such as power of expression and boldness of communication. Outside readings and papers required.

### ART\* K107 3 CREDIT HOURS INTRODUCTION TO STUDIO ART

This is a course covering the fundamentals of visual art through hands-on experience. The course includes basic design and composition, color theory, study of three-dimensional form, and a thorough exploration of the creative process through the use of a wide variety of media and techniques, including drawing, painting, collage and mixed media sculpture. Not recommended for art majors. Meets 3 hours per week.

#### ART\* K111 (formerly ART K112) 3 CREDIT HOURS DRAWING I

This course is an introduction to basic drawing skills. The course includes work with still life, landscape, self-portrait, and interior space in black and white media. Emphasis is placed on the importance of drawing through careful observation. A variety of techniques and styles are covered to arrange compositions and create the illusion of volume and perspective. Studio: Meets 6 hours per week.

#### ART\* K112 (formerly ART K113) 3 CREDIT HOURS DRAWING II

#### Prerequisite: ART\* K111.

This course is an exploration of drawing basics in various media including color, with an emphasis on composition and technique. Both representation and abstraction are explored. Students work with still life, portraiture, and the figure and a final project series of their own choice. Studio: Meets 6 hours per week.

### ART\* K121 (formerly ART K101) 3 CREDIT HOURS TWO-DIMENSIONAL DESIGN

This course is an introduction to the

theory and practice of two-dimensional design. Students will use the principles of

design as an expressive tool to communicate visually. A variety of black and white and color mediums will be used including drawing, painting and collage. Studio: Meets 6 hours per week.

### ART\* K122 3 CREDIT HOURS THREE DIMENSIONAL DESIGN

Students will explore basic three-dimensional art elements: line, plane, mass, volume, space, size, color, light, surface and context. Students will experiment with materials and processes through assignments exploring artistic themes while solving various design problems. Studio: Meets 6 hours per week.

### ART\* K131 3 CREDIT HOURS SCULPTURE I

Prerequisite: ART\* K122.

This course is an introduction to creative sculpture and includes instruction in the use of tools, materials and processes to create three-dimensional forms. A range of materials will be used to develop figurative, representational, and abstract sculpture. Studio: Meets 6 hours per week.

#### ART\* K151 (formerly ART K115) 3 CREDIT HOURS PAINTING I

Prerequisite: ART\* K111 or permission of the instructor.

This course is an intensive introduction to representational painting with acrylics. Students are given a firm foundation in painting through an introduction to the materials of painting and thorough study of color theory and color mixing. The knowledge of color theory will be put into practice with the painting of the still life. A variety of exercises and techniques will be explored including preparing different surfaces on which to paint as well as aesthetic explorations. It will be emphasized that the skills of drawing are an integral painting tool. Studio: Meets 6 hours per week.

#### ART\* K152 (formerly ART K201) 3 CREDIT HOURS PAINTING II

*Prerequisite: ART\* K151 or permission of the instructor.* 

In this class, students will get the opportunity to further their exploration of painting with acrylics through a variety of approaches including abstraction. Students will be encouraged to experiment with a variety of subject matter and themes as well as to develop their own individual styles. Studio: Meets 6 hours per week.

### ART\* K161 (formerly ART K105) 3 CREDIT HOURS CERAMICS I

This course is an introduction to the methods and nature of working with clay as an artistic medium. Emphasis is placed on the practical use of design principals such as: line, symmetry, balance, visual mass, texture, ground/foreground relationships, and spatial relationships. Various artistic movements such as surrealism, minimalism, and abstraction, will be explored. Assignments allow the exploration of artistic themes while solving various design problems. The class includes discussions and demonstrations on various glazing and finishing techniques. Studio: Meets 6 hours per week.

### ART\* K162 (formerly ART K106) 3 CREDIT HOURS CERAMICS II

Prerequisite: ART\* K161 or permission of instructor.

This course is a continuation of Ceramics I, with the addition of advanced concepts and techniques. Students are required to develop a unified portfolio of work using a combination of sketches,

research, and experiments to develop a theme. Studio: Meets 6 hours per week.

### ART\* K167 3 CREDIT HOURS PRINTMAKING

Prerequisite: ART\* K107 or ART\* K111 or ART\* K121.

This course is an introduction to the materials, design and techniques of monotype, monoprint, and relief printing. Work is approached in a creative and individualistic manner and emphasis is placed on experimentation with various processes. Students will create editions of their original work using a mechanical press as well as individualized hand printing. The importance of studio safety is emphasized. Non-toxic, solvent free inks are used. Students will do a research project on the diversity of cultural expression, and will learn of printmaking concepts and processes that are used globally for artistic expression. Studio: Meets 6 hours per week.

### ART\* K186 3 CREDIT HOURS INTRODUCTION TO FILM

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. An aesthetic and critical approach to film study, this course helps students develop a cinematic vocabulary and apply analytic skills. Classroom screening provide texts for discussion and analysis; they are supplemented by lectures, readings and writing assignments. Representative international films from the early years of the industry to the present will be taught.

### ART\* K198 3 CREDIT HOURS SPECIAL TOPICS: HISTORY OF FILM

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.

This course will survey the history of film from its beginnings to the present. Emphasis will be placed on the development of forms and techniques, production methods, and film's relationship to other arts and to social/political currents. Focus will be placed on critical analysis and discussion of selected films illustrating aesthetic principles that govern cinematic value and meaning.

### ART\* K204 3 CREDIT HOURS HISTORY OF WOMEN IN THE ARTS

Prerequisites: ENG\* K101 or ENG\* K101S and any 100-level Humanities, History or Anthropology class; or permission of the instructor.

This course will cover a global history of women in the visual arts. Art terminology and visual language will be used to examine varied artworks by women from an assortment of historic, social and political and personal contexts. Because historically women have been underrepresented and excluded from participating in the visual arts, students will develop their abilities to critique and question the art historical tradition through a significant amount of writing, and thereby achieve a general level of knowledge and appreciation for the contributions of women artists throughout history.

### ART\* K211 3 CREDIT HOURS DRAWING III

Prerequisite: ART\* K112.

This course will provide students who have taken Drawing I & II the opportunity to continue to develop their drawing skills. Students will evolve their own style of drawing while continuing to strengthen their observational and perceptual skills through focus and the live model. Students will begin to place conceptual importance on their drawings through intensive group and individual critiques. Studio: Meets 6 hours per week.

### ART\* K288 3 CREDIT HOURS PORTFOLIO DEVELOPMENT I

Prerequisites: ENG\* K101 or ENG\* K1015 placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better; and ART\* K111. Students will prepare a portfolio stressing the individual's career and/or education goals. This course is recommended for any student preparing to transfer, apply for graduate study or apply for a job in art or architecture. Students will become familiar with the essential business practices of the visual arts profession and will learn how to professionally photograph and present their work. Studio: Meets 6 hours per week.

### ART\* K291 3 CREDIT HOURS PORTFOLIO DEVELOPMENT II

Prerequisite: ART\* K288. Students who have completed Portfolio Development I will continue to work on a portfolio stressing the individual's career and/or education goals. This course is recommended for any student preparing to transfer, apply for graduate study or apply for a job in art or architecture. Students will become familiar with the essential business practices of the visual arts profession and will learn how to professionally photograph and present their work. Studio: Meets 6 hours per week.

# AMERICAN SIGN LANGUAGE

### ASL\* K101 3 CREDIT HOURS AMERICAN SIGN LANGUAGE I

This is a first course of study of American Sign Language, the language used by the Deaf Community in the United States. ASL I introduces students to the fundamentals of ASL grammar, vocabulary, finger spelling, numbers, and visual-gestural communication. Introduction to Deaf Culture is integrated into this beginning level course.

### ASL\* K102 3 CREDIT HOURS AMERICAN SIGN LANGUAGE II

Prerequisite: ASL\* K101 with a "C" or better; or permission of the instructor. This is a continuation of American Sign Language I and further covers fundamentals of ASL grammar, vocabulary, fingerspelling, numbers, and visual-gestural communication. Continued study of Deaf Culture is integrated into this course.

# **ASTRONOMY**

### AST\* K101 (formerly AST K101) 3 CREDIT HOURS PRINCIPLES OF ASTRONOMY

Corequisite: ENG\* K096 or higher. Please note: if completing ENG\* K096 prior to enrolling in AST\* K101, a grade of "C#" or better is required for registration into this course.

This course covers the ideas that account for the earth and heavenly bodies and their characteristics. This course is designed to develop an appreciation of the beauty and order of the universe. Observational exercises, including star identifications and use of the telescope, are included.

### AST\* K111 4 CREDIT HOURS INTRODUCTION TO ASTRONOMY

Prerequisites: ENG\* K101 or ENG\* K101S with a "C" grade or better; and MAT\* K095 or MAT\* K095I with a "C#" grade or better. In addition to understanding the mechanisms involved in ascertaining distance. temperature and movements of celestial bodies, students will be able to orientate themselves with the night sky by using constellations as guides. This material will also cover the ideas that account for the earth and heavenly bodies and their characteristics. This course is designed to develop an appreciation of the beauty and order of the universe. The laboratory portion of the course consists of activities in elementary astronomy designed to reinforce and extend knowledge of selected topics covered in the lecture portion of the course. Students who have taken AST\* K101 will not receive credit for this course.

# **BUSINESS-GENERAL**

### BBG\* K101 (formerly BUS K111) 3 CREDIT HOURS INTRO TO BUSINESS

In this course, the focus for students will be on a practical understanding and application of how business works, how it contributes to quality of life, the rewards of entrepreneurship, its legal framework, trade terminology, and business operations including marketing, finance, accounting, and management. This course gives an orientation to business curriculum. This course will emphasize the relationship of business to an individual's everyday life in American society. Students required to take BBG\* K101 should enroll in it prior to or in the first semester that they take a BBG\*, BMG\* or BMK\* course. This course is open to all General Studies students as an elective. Certain

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restrictions apply to this course for business majors. Please refer to your program of study prior to registration.

### BBG\* K115 3 CREDIT HOURS BUSINESS SOFTWARE APPLICATIONS

Prerequisites: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better; and MAT\* K095 or MAT\* K095I placement∞. Using Microsoft Suite application software, students in this hands-on course will learn to use each of the software

will learn to use each of the software packages as they relate to the business environment. These software packages include an emphasis on Excel to build flexible spreadsheets used in business decision-making, supplemented with Word to produce professional-looking documents, Access to select and analyze data to produce valid results, and Powerpoint to effectively present and communicate.

### BBG\* K210 3 CREDIT HOURS BUSINESS COMMUNICATION

Prerequisite: ENG\* K101 or ENG\* K101S. Emphasizes communication technology and business communication concepts in a business environment. After a review of grammar, punctuation and sentence structure, students will plan, organize and edit several forms of business communications, including memorandums, letters, resumes and reports. Oral presentations are part of the curriculum.

### BBG\* K231 (formerly MGT K113) 3 CREDIT HOURS BUSINESS LAW I

Prerequisite: ENG\* K101 or ENG\* K101S. This course provides the student with an understanding of fundamental legal principles and their applications to business transactions and to individual rights and obligations. Crimes and torts are examined, and special emphasis is placed on the study of the law of contracts.

#### BBG\* K232 (formerly MGT K114) 3 CREDIT HOURS BUSINESS LAW II

Prerequisite: BBG\* K231.

This course covers the basic principles of the substantive law governing real and personal property, sales transactions, and commercial paper.

### BBG\* K291 3 CREDIT HOURS BUSINESS CAPSTONE

Prerequisite: Permission of the program coordinator. This course is designed to be taken dur-

ing the last semester prior to graduation

and is targeted for Business Administration Management AS, Marketing AS and Accounting Career AS students. The course will bring together all the aspects of business that the student has been exposed to so far (Accounting, Finance, Management, Marketing, Business Law, Operations, etc.) Pedagogy will combine a lecture, case studies and business simulations.

### BBG\* K294 (formerly BUS K215) 1-3 CREDIT HOURS † BUSINESS INTERNSHIP

Prerequisite: Permission of the program coordinator.

In this course, students receive on-the-job placement∞ in a business setting in one of many areas (accounting, management, or marketing). This is a college-supervised experience based on a learning contract with evaluations by both the college faculty and the staff of the cooperating business. † A one-credit business practicum is required in the Public Administration and Business Certificate Programs, while a three-credit business practicum is required in the Business Administration Management Career and Business Administration Public Administration Option Associate Degree Programs.

# BUSINESS-ENTREPRENEURSHIP

### BES\* K118 3 CREDIT HOURS SMALL BUSINESS MANAGEMENT

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is designed to assist students with the knowledge and skills needed to operate and/or develop a small business. Emphasis will be placed on the entrepreneurial aspects of creating, managing, and gaining profit from a small business.

#### BES\* K218 (formerly BUS K211) 3 CREDIT HOURS ENTREPRENEURSHIP

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. ∞. The course is designed especially for those students who wish to start a business. A strong emphasis is placed on the practical applications of financing a new business, marketing goods and services, dealing with competitors, and handling leases and landlords. Understanding legal elements for the new business person and other topics make up the bulk of this course. Reality-based projects and instruction enable students to practice immediate application of content.

### BES\* K239 3 CREDIT HOURS BUSINESS PLAN DEVELOPMENT

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course will teach the student the process of developing a business plan. This course will draw on knowledge obtained from previous business courses. The course will utilize business plan development software. Students will individually, and on a team basis, develop a complete business plan.

# **BUSINESS-FINANCE**

### BFN\* K110 (formerly ACC K110) 3 CREDIT HOURS PERSONAL FINANCE

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.  $\infty$  and MAT\* K095 or MAT\* K095I placement $\infty$ . This course provides, in a non-technical presentation, a basic understanding of personal finance. The choices that consumers face in managing their finances are examined. The topics include personal income and budgeting, consumer credit, investing, taxes, housing, insurance, retirement, and estate planning.

### BFN\* K201 (formerly BUS K235) 3 CREDIT HOURS PRINCIPLES OF FINANCE

Prerequisites: ACC\* K111; MAT\* K123 or MAT\* K146 or MAT\* K167 or MAT\* K172 or MAT\* K186.

This course offers an introduction to the basic principles of finance with an emphasis on the role a finance manager plays in the corporate world. Areas covered are financial analysis and forecasting, operating and financial leverage, short and long term financing alternatives, capital budgeting, time value of money, mergers and acquisitions, and international financial management.

# **BIOLOGICAL SCIENCE**

### BIO\* K111 (formerly BIO K127) 3 CREDIT HOURS INTRODUCTION TO NUTRITION

### Prerequisite: ENG\* K101 or ENG\* K101S placement $\sim$ or completion of ENG\* K096 with a "C#" grade or better. This introductory course covers the principles of nutrition, nutrients, their sources, the interaction between those nutrients and the human body, and the selection of

adequate diets for different age groups.

### BIO\* K115 (formerly BIO K115) 4 CREDIT HOURS HUMAN BIOLOGY

Corequisite: ENG\* K096 or higher. Please note: if completing ENG\* K096 prior to enrolling in BIO\* K115, a grade of "C#" or better is required for registration into this course.

This introductory course focuses on a presentation of human structure and function, including a survey of the body's system for students who want to be more knowledgeable about the life processes of their own bodies. Lab procedures do not involve animal dissections. This course does not meet the pre-admission requirement for the Nursing Program. Three-hour lecture; one three- hour laboratory period.

### BIO\* K121 (formerly BIO K111) 4 CREDIT HOURS GENERAL BIOLOGY I

Prerequisites: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better. Corequisites: CHE\* K111 or CHE\* K121, either course with a "C" grade or better; or permission of the department chair. Please note: If completing CHE\* K111 or CHE\* K121 prior to enrolling in BIO\* K115, a grade of "C" or better is required for registration into

this course. This course introduces the major principles and concepts of modern biology. Topics to be covered include molecular and cellular biology, cell division, cellular transport systems, cellular metabolism, the specialization and differentiation of both plant and animal cells, and modern genetics. Three-hour lecture; one threehour laboratory period.

### BIO\* K122 (formerly BIO K112) 4 CREDIT HOURS GENERAL BIOLOGY II

Prerequisite: BIO\* K121 with a "C" grade or better or permission of the instructor. Corequisite: None required; CHE\* K122 is recommended.

This course is a continuation of General Biology I. Topics to be covered include taxonomy, the diversity of life forms from the microbes to the animals, the structures and functions of both plant and animal systems, as well as ecology, ecosystems and evolution. (For transfer credit, student should take both BIO\* K121 and K122.) Three-hour lecture; one three-hour laboratory period.

### BIO\* K145 (formerly BIO K121) 4 CREDIT HOURS GENERAL ZOOLOGY

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better; or permission of the department chair.

Corequisite: None required; CHE\* K121 or CHE\* K111 is recommended.

This course introduces the study of animals, including a phylogenetic survey of organisms from the protozoan's to the chordates. Aspects of anatomy, physiology, reproduction, development and genetics of select groups will be covered. Three-hour lecture, one three-hour laboratory period.

### BIO\* K155 (formerly BIO K113) 4 CREDIT HOURS GENERAL BOTANY

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C" grade or better. Corequisite: None required; CHE\* K121 or CHE\* K111 highly recommended. This course introduces the study of plant life, including a phylogenetic survey from algae to the flowering plants. Aspects of anatomy, physiology, genetics, and reproduction of select plant life will be covered. Three-hour lecture; one threehour laboratory period.

### BIO\* K175 (formerly BIO K134) 3 CREDIT HOURS INTRODUCTION TO MARINE SCIENCE

Corequisite: ENG\* K096 or higher. Please note: if completing ENG\* K096 prior to enrolling in BIO\* K175, a grade of "C#" or better is required for registration into this course.

This course is an introduction to marine science. Topics to be explored include general marine biology, intertidal ecology, plankton biology, marine communities, and the geomorphology of the New England coast. Some field work will be included.

### BIO\* K180 (formerly BIO K128) 3 CREDIT HOURS PRINCIPLES OF ENVIRONMENTAL SCIENCE

Corequisite: ENG\* K096 or higher. Please note: if completing ENG\* K096 prior to enrolling in BIO\* K180, a grade of "C#" or better is required for registration into this course.

This is a basic course in environmental studies that introduces ecological principles and a global perspective on environmental problems such as deforestation, droughts, floods, soil erosion, overpopulation, food shortages and pollutants. Some field work will be included. This course is equivalent to ENV\* K101 Environmental Studies. Course fulfills International/Intercultural Requirement.

### BIO\* K198 4 CREDIT HOURS SPECIAL TOPICS: TROPICAL BIOLOGY

Prerequisite: ENG 101 or ENG\* K101S with a "C" grade or better. Thirteen on campus lectures will introduce students to the biodiversity of a Caribbean reef and tropical rainforest species. The lecture will survey the varying habitats of tropical marine & terrestrial ecosystems, focusing on organisms that students would encounter in the laboratory component. The focal point of this course is travel-based to an International field station. The laboratory component includes 5 days of research at Marine Tropical Research and Education Center (TREC) in Ambergris Caye, Belize (scheduled during winter intercession). Activities

### BIO\* K211 (formerly BIO K211) 4 CREDIT HOURS ANATOMY & PHYSIOLOGY I

will include swimming and snorkeling.

Prerequisites: BIO\* K121 and CHE\* K111 or higher passed with a "C" grade or better. This course is a comprehensive study of the gross anatomical structure and physiology of the human body pertaining to cells, tissues, membranes, organs, and the following systems: integumentary, skeletal, articular, muscular and nervous including special senses. Anatomy and Physiology is a two semester course. Students must enroll in both BIO\* K211 and BIO\* K212 for transfer credits to other institutions. BIO\* K211 is offered in the fall semester only. Three-hour lecture; one three-hour laboratory period per week.

### BIO\* K212 (formerly BIO K212) 4 CREDIT HOURS ANATOMY & PHYSIOLOGY II

Prerequisite: BIO\* K211 with a "C" grade or better. CHE\* K111 or higher strongly recommended.

A continuation of BIO\* K211, Anatomy and Physiology I, this course covers the following systems: endocrine, circulatory, lymphatic, respiratory, digestive (nutrition), urinary (including fluids and electrolytes), and reproduction, as well as human development and genetics. Anatomy and Physiology is a two semester course. Students must enroll in both BIO\* K211 and K212 for transfer credit to other institutions. BIO\* K212 is offered in the spring semester only. Three-hour lecture; one three-hour laboratory period per week.





### BIO\* K235 (formerly BIO K225) 4 CREDIT HOURS MICROBIOLOGY

Prerequisites: BIO\* K121 and CHE\* K111 or CHE\* K121 or permission of the instructor, all courses passed with a "C" grade or better. BIO\* K122 is recommended. This course covers a comprehensive study of microorganisms. Topics covered will include the basic characteristics, morphology, physiology, growth, reproduction, and genetics of bacteria, as well as a brief taxonomical survey of the following microbial life forms: Archaea, Eubacteria (Cyanobacteria, Mycoplasms, Rickettsia, Chlamydia), Fungi, Algae, Protozoans, and Viruses. Emphasis will be on species that affect humans. Laboratory activities will include various techniques of staining, culturing, and isolating bacteria. The morphology and metabolic processes of select microbial groups will be studied. Students will learn to apply various

modern bio- techniques that are used for controlling the growth of microbes, and to identify unknowns. Three hours of lecture; three hours of lab each week.

### BIO\* K260 3 CREDIT HOURS PRINCIPLES OF GENETICS

Prerequisites: ENG\* K101 or ENG\* K101S; MAT\* K137 or MAT\* K137S; BIO\* K121; CHE\* K111 or CHE\* K121; all courses passed with a "C" grade or better.

This course is designed to cover the basic concepts of genetics, including the theory of chromosomes, classical Mendelian inheritance, principles of human genetics, the genetic code, the role of the nucleic acids in gene expression, genetic mutations, and topics in modern genetics in areas such as recombinant DNA, biotechnology, gene mapping and diagnosis of human genetic disease.

#### BIO\* K262 (formerly BIO K252) 4 CREDIT HOURS GENETICS

Prerequisites: BIO\* K121; BIO\* K122; MAT\* K186 or higher; CHE\* K111 or CHE\* K121 & CHE\* K122; or completion of BIO\* K121, MAT\* K137 or MAT\* K137S, CHE\* K111 or CHE\* K121 and the written permission of the instructor, ALL courses passed with a "C" grade or better.

This introductory course covers the basic principles, theories and laws of heredity. Topics to be covered will include mitosis, meiosis, DNA & RNA and their role in protein synthesis, chromosomes, genes, recombinant DNA, and Mendelian and Human Genetics. Laboratory experience will incorporate the use of fruit flies to examine the ways in which traits are inherited, as well as gel electrophoresis and recombinant DNA procedures to explore modern concepts of cytogenetic technology.

### BIO\* K270 (formerly BIO K230) 4 CREDIT HOURS ECOLOGY

Prerequisites: ENG\* K101 or ENG\* K101S; MAT\* K137 or MAT\* K137S or higher; CHE\* K111 or higher; and one of the following: BIO\* K121 and BIO\* K122, BIO\* K155 or BIO\* K145, all courses passed with a "C" grade or better.

This course looks at a study of the relationship between plants and animals and their environment and is designed to cover ecological concepts and their applications to life in aquatic and terrestrial environments. Laboratory work will include travel to off campus field-study locations. Three-hour lecture; one threehour laboratory period per week.

#### BIO\* K272 (formerly BIO K232) 4 CREDIT HOURS MARINE ECOLOGY

Prerequisites: ENG\* K101 or ENG\* K101S; MAT\* K137 or MAT\* K137S or higher; CHE\* K111 or higher; and BIO\* K121 or BIO\* K155 or BIO\* K145 required, all courses passed with a "C" grade or better. This course is an ecological study of marine organisms and their environments that includes estuaries, tidal marshes, rocky shores, coral reefs, hydrothermal vents and the open ocean. The interaction of plants and animals with each other and their physical environment will be stressed. Lab fieldwork involves

### BIO\* K289 3 CREDIT HOURS ENVIROMENTAL SCIENCE SEMINAR

off campus sites to study local marine

environments.

Corequisite: Recommended BIO\* K180 or ENV\* K101; or permission of the instructor. This seminar consists of assigned readings and guest lecturers on various environmental topics that are important to the development of all students who want to learn, to understand and to write effectively about the environment. Some common seminar topics may include federal and state regulations, solid and municipal waste management, best management practices (BMPs), environmental restoration and remediation, alternative and renewable energy, sustainable landscape management, sustainable agriculture, stewardship, land use, water quality, stormwater management and global and local environmental quality trends. Students are required to discuss, think about and write about the topics, carrying out their own library research to support positions that they will develop. This course is equivalent to ENV\* K295 Environmental Issues Seminar.

# **BUSINESS-MANAGEMENT**

### BMG\* K202 (formerly MGT K111) 3 CREDIT HOURS

PRINCIPLES OF MANAGEMENT Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. Fundamental principles of management and business operations are discussed with emphasis placed on management orientation, policy making, practical problem analysis, and philosophy. Attention also centers on the following: planning, organizing, directing, controlling, budgeting functions, qualitative and quantitative decision-making and financial analyses.

### BMG\* K205 3 CREDIT HOURS QUANTITATIVE BUSINESS ANALYSIS

Prerequisites: ENG\* K101 or ENG\* K101S; MAT\* K123 or MAT\* K146 or MAT\* K167 or MAT\* K172 or MAT\* K186.

The course emphasizes quantitative and statistical concepts and their applications in a business environment, Emphasis is placed on developing skills in problem definition, problem solution and the application of the solution to decision making. The student will demonstrate these skills by presenting and defending their proposals to resolving specific business issues through individual and team projects.

### BMG\* K210 3 CREDIT HOURS ORGANIZATIONAL BEHAVIOR

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course surveys psychological principles applied to work settings and organizational management. Topics include recruiting, employee selection, and measurement and performance development. Employee motivation, incentives and job satisfaction are explored. Theories of leadership, organizational communication and organizational development are investigated. Change adaptation, stress management as well as workplace violence are addressed. This course is equivalent to PSY\* K247 Industrial and Organizational Psychology.

# BMG\* K218 (formerly MGT K218) 3 CREDIT HOURS

**OPERATIONS MANAGEMENT** *Prerequisites: ACC\* K118 or ACC\* K233; MAT\* K123 or MAT\* K146 or MAT\* K167 or* 

### MAT\* K172 or MAT\* K186.

Fundamental principles and concepts of operations management and business operations are discussed as they relate to the planning and controlling of the operating processes and work flow activities in private and public organizations. Key Topics include production and work planning, capacity planning, inventory control, quality control, scheduling, distribution, plant location, maintenance management, the roles of efficiency and effectiveness and decision making. This course is equivalent to MFG\* K230.

### BMG\* K220 (formerly MGT K212) 3 CREDIT HOURS

# HUMAN RESOURCES MANAGEMENT

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.

This course deals with the development and direction of human resources. Areas of discussion include affirmative action, recruitment, selection, placement∞, grievances, wages, discipline, instruction of employees and their evaluations, OSHA, ERISA, and time management and other topics (Previously called Personnel Management).

### BMG\* K228 (formerly MGT K213) 3 CREDIT HOURS LABOR AND EMPLOYMENT LAW

Prerequisites: BBG\* K231 and BMG\* K202. This course provides the student with an understanding of the legal principles and their applications to the employer-employee relationship including such topics as unionism and collective bargaining (including union organizing, contract negotiations, strikes and boycotts); wages, hours and benefits; dispute resolution (grievance and arbitration procedures); employment discrimination; and employee privacy.

# **BUSINESS-MARKETING**

#### BMK\* K103 (formerly MRK K112) 3 CREDIT HOURS PRINCIPLES OF RETAILING

This course covers a practical introduction to the principles and practices of retailing in today's competitive environment. Elements of retail marketing and management are studied including merchandising, store organization and policies, buying, promotion, image creation, pricing, and customer service. Additional concepts such as trends in retailing, site selection, and personnel policies are also discussed. Students utilize case studies and examples drawn from actual, current retailing activities. They also create their own retail store business plan.

### BMK\* K106 (formerly MRK K114) 3 CREDIT HOURS PRINCIPLES OF SELLING

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is designed to prepare students for professional selling of products, services, and ideas. It concentrates on the mutual satisfaction of both buyers and sellers and the role of the salesperson. Topics studied include the communication process, sales territory management, and the seven steps in the selling process: prospecting, approach, presentation, demonstration, handling of objections, closing and follow-up. Practical application of these concepts in industrial sales, consumer sales, public service selling, and political campaigns is also examined through case studies, role-playing, and student participation exercises.

### BMK\* K123 (formerly MRK K119) 3 CREDIT HOURS

PRINCIPLES OF CUSTOMER SERVICE Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is the study of the principles and practices involved in providing excellent customer service. Students learn effective verbal and nonverbal communication techniques, professional customer service behaviors, problem solving and the monitoring and measuring of customer service. Delivery of customer service by telephone, in person, by mail and via the Internet is studied.

### BMK\* K201 (formerly MRK K111) 3 CREDIT HOURS PRINCIPLES OF MARKETING

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course introduces the four elements of the marketing mix: product decisions, pricing decisions, promotional decisions and distribution decisions. Emphasis is on the importance of marketing research and consumer behavior in the formulation of marketing strategies. Students study marketing principles and practices as they are applied to consumer and industrial products and services as well as in not-for-profit organizations. Additional topics include marketing in a global economy, ethics, and marketing information systems. The marketing campaigns of small and large companies are discussed as practical examples. Students develop

their own marketing plans using strategy and principles learned in the course.

### BMK\* K235 (formerly MRK K118) 3 CREDIT HOURS PUBLIC RELATIONS

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is a study of the principles and practices of modern public relations as they apply to profit making and not for profit organizations. Students study a practical approach to the methods of establishing and maintaining a positive relationship between an organization and its stakeholders. These stakeholders or "publics" include customers, employees, competitors, stockholders, government, vendors, and society in general. Topics include special events planning, media relations planning, and corporate communications. Ethical and social responsibility and negative publicity are also discussed. Students apply their learning by providing public relations skills in a service learning community placement∞ or by developing a public relations campaign as a capstone project.

### BMK\* K241 (formerly MRK K113) 3 CREDIT HOURS PRINCIPLES OF ADVERTISING

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course surveys the basic elements, functions, and principles of advertising. Emphasis is on advertising's role as a marketing tool. Students study current advertising campaigns and marketing communication methods. Target marketing, image creation, and ethical aspects of advertising are discussed. Selection of print media, electronic media, and supportive promotional techniques are included. Students create their own comprehensive advertising campaigns using strategies learned in the course.

### BMK\* K292 3 CREDIT HOURS PRACTICUM IN MARKETING

Prerequisite: Permission of the program coordinator.

This course is based on on-the-job placement∞ in a business setting. This is a college-supervised experience based on a learning contract with evaluations by both the college faculty and the staff of the cooperating business.



# COMPUTER-AIDED DRAFTING

# CAD\* K106 (formerly CAD K1200) 1 CREDIT HOUR

### **COMPUTER-AIDED DRAFTING** *Corequisite: CAD\* K107.*

This course exposes the student to the current means of generating graphic images with computers. Topics covered include CAD\* overview, computer terminology, hardware descriptions and requirements, file manipulation and management, 2D and 3D geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail, and assembly drawings.

### CAD\* K107 (formerly CAD K1201) 2 CREDIT HOURS COMPUTER-AIDED DRAFTING LAB

**COMPUTER-AIDED DRAFTING LAB** *Corequisite: CAD\* K106.* 

This laboratory utilizes software in an IBM-PC environment. Topics given in the lecture will be learned through solving application problems on the computer.

### CAD\* K111 (formerly CAD K1300) 1 CREDIT HOUR CAD LATEST VERSION UPDATE

Prerequisites: CAD\* K106/107. This course is designed to update Auto-CAD skills and is for those who are familiar with the basic AutoCAD program. Topics addressed will be the new commands within the latest release. A series of drawing assignments designed to explore the new concepts will be completed. General topics will include the graphic screen layout including any new features and how they are used.

### CAD\* K124 (formerly CAD K2216) 1 CREDIT HOUR COMPUTER-AIDED DRAFTING -ELECTRICAL

Corequisite: CAD\* K125.

The student will learn the techniques of printed circuit board layout and design. Topics will include conductor spacing, conductor thickness and width, device architecture, and electrical noise considerations. A discussion of the features of popular PC board programs will be included.

### CAD\* K125 (formerly CAD K2217) 2 CREDIT HOURS COMPUTER-AIDED DRAFTING -ELECTRICAL LAB

Corequisite: CAD\* K124. Students will learn how to use CAD software to develop electronic symbol libraries and create schematic diagrams. Other computer programs will be used to generate lists, lay out components, and perform routing.

### CAD\* K130 (formerly CAD K2210) 1 CREDIT HOUR COMPUTER-AIDED DRAFTING - INDUSTRIAL

Prerequisites: CAD\* K106/107 and the latest CAD release working knowledge. Corequisite: CAD\* K131.

This course allows students to continue to learn and practice industrial drafting concepts using a CAD system. Typical industrial topics such as threads, gears, cams, piping systems, structural, welding, jigs, fixtures, and assembly are given as problems for the student to solve.

### CAD\* K131 (formerly CAD K2211) 2 CREDIT HOURS COMPUTER-AIDED DRAFTING -INDUSTRIAL LAB

Prerequisites: CAD\* K106/107 and the latest CAD release working knowledge. Corequisite: CAD\* K130. There is a CAD station for each student

to use to solve the application problems given. Typical problems will be preparing drawings utilizing the topics in lecture.

### CAD\* K202 (formerly CAD K2222) 1 CREDIT HOUR CAD - ADVANCED TOPICS

Prerequisites: CAD\* K106/107 and latest CAD release working knowledge. Corequisite: CAD\* K203.

This course is designed to expose the student to advanced CAD techniques. Typical topics will include three dimensional drawing, solid modeling, rendering, and customizing AutoCAD.

### CAD\* K203 (formerly CAD K2223) 2 CREDIT HOURS CAD - ADVANCED TOPICS LAB

Prerequisites: CAD\* K106/107and latest CAD release working knowledge.

Corequisite: CAD\* K202. This course covers drawing assignments that will include topics involved with applications revolving around three dimensional solids modeling.

### CAD\* K214 1 CREDIT HOUR CAD - CONSTRUCTION

Prerequisites: CAD\* K106/107 and latest CAD release working knowledge. Corequisite: CAD\* K215. Students continue to learn and practice construction drafting concepts using a CAD system. Students will solve graphic problems typical to construction topics such as plan and elevation views, structural and concrete detailing, construction section-details, topography and site planning, and schedules including structural members, finish, doors and windows. Creating and using symbol libraries will be introduced.

### CAD\* K215 2 CREDIT HOUR CAD - CONSTRUCTION LAB

Prerequisites: CAD\* K106/107 and latest CAD release working knowledge. Corequisite: CAD\* K214. Students will be assigned graphic problems typical to construction topics based on the lecture.

### CAD\* K239 (formerly DFT K1115) 3 CREDIT HOURS GEOMETRIC DIMENSIONING AND TOLERANCING

Prerequisites: CAD\* K106/107 and latest CAD release working knowledge. This course will introduce the concepts of Geometric Dimensioning and Tolerance with respect to design and inspection considerations. The entire content will be based upon the ASME Y14.5M- 1994 standards. The concepts of proper dimensioning and tolerance methods with clear distinct outcomes will be defined. The use of computer aided drafting will aid in the delivery of the GDT concepts. This course is equivalent to MFG\* K239.

### CAD\* K250 (formerly CAD K2230) 1 CREDIT HOUR

### CAD 3-D PARAMETRIC MODELING

Prerequisites: CAD\* K106/107 and latest CAD release working knowledge. Corequisite: CAD\* K251.

This course will introduce the student to the concepts of a 3-D parametric modeling program. Lecture topics will include 3-D concepts, designer fundamentals, constraints, display parameters and the formulation of 3-D assembly drawings.

# CAD\* K251 (formerly CAD K2231) 2 CREDIT HOURS

CAD 3-D PARAMETRIC MODELING LAB Prerequisites: CAD\* K106/107 and latest CAD release working knowledge. Corequisite: CAD\* K250.

Students will learn the techniques of developing a drawing in 3-D from the beginning facets of geometry development. The drawing assignments will include practical real world applications. Students will be developing visual skills necessary to design complex structures. The major emphasis of lab assignments will be 3-D assemblies.

# **CHEMISTRY**

### CHE\* K101 **3 CREDIT HOURS** INTRODUCTION TO CHEMISTRY

Prerequisites: ENG\* K096 and MAT\* K095 or MAT\* K095I, both completed with a "C#" grade or better.

This course surveys the important chemical theories and applications. The topics covered will include metric units and measurements of matter, the atomic structure of matter, chemical bonding and energy changes, chemical formulas and the naming ionic compounds, chemical equations and stoichiometry, gas laws, solutions and very basic organic and biochemistry concepts. This course does not meet the chemistry prerequisite required for BIO\* K211 or BIO\* K235. The course is not open to students who have passed CHE\* K111 or higher with a "C" grade or better.

# CHE\* K111 (formerly CHE K103) 4 CREDIT

HOURS CONCEPTS OF CHEMISTRY Prerequisites: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better and MAT\* K137 or MAT\* K137S with a "C" grade or better (or permission of the instructor on math requirement).

This course offers a brief and comprehensive survey of important chemical theories and some of the applications of chemistry. Topics covered will include measurements in chemistry, atomic structures and chemical bonding, chemical reactions, states of matter, stoichiometry, theories of solution, and basic organic and biochemical concepts. Course Design: CHE\* K111 is meant for students with little or no background in chemistry who need the course in preparation for General Chemistry, or for students who need to meet a pre-admission requirement for nursing or other allied health programs, or those who need a lab science course.

### CHE\* K121 (formerly CHE K111) **4 CREDIT HOURS GENERAL CHEMISTRY I**

Prerequisites: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better; MAT\* K172 and high school chemistry or CHE\* K111 all passed with a "C" grade or better; or permission of the instructor or department chairperson.

Corequisite: MAT\* K186.

In this course, students will study the fundamental principles, theories, and laws of chemistry. Topics include atomic theory and the structure of the atom, the aggregated states of matter, kinetic molecular theory, chemical bonding, stoichiometry and periodicity, solutions, and colloids. Three-hour lecture; one three-hour laboratory period. OFFERED IN FALL SEMESTER ONLY.

### CHE\* K122 (formerly CHE K112) **4 CREDIT HOURS GENERAL CHEMISTRY II**

Prerequisites: CHE\* K121 with a "C" or better; MAT\* K186 with "C" grade or better. This course includes further study of the principles, theories, and laws of chemistry. Topics include thermo-chemistry, kinetics, chemical equilibrium, oxidation reduction and electro-chemistry, introduction to organic and nuclear chemistry, and the chemistry of the elements and their compounds. Three-hour lecture; one three-hour laboratory period. Chemistry I and II are ordinarily both taken for transfer credit. OFFERED IN SPRING SEMESTER ONLY.

### CHE\* K210 (formerly CHE K205) **4 CREDIT HOURS INTRODUCTION TO ORGANIC** CHEMISTRY

Prerequisites: MAT\* K137 or MAT\* K137S or higher; CHE\* K111 or CHE\* K121 & CHE\* K122, all courses passed with a "C" grade or better.

This course is a one semester introduction to organic chemistry designed for students that need a general knowledge of organic compounds in science and technology fields. Both theoretical and practical applications of carbon compounds will be studied. Topics include nomenclature; functional group of reaction mechanisms; the major groups of hydrocarbons and their derivatives; carbohydrates; lipids; proteins; nucleic acids; and modern laboratory techniques. (This course is not recommended for science and technology programs requiring two semesters of Organic Chemistry.)

# CHE\* K217 (formerly CHE K211) **4.5 CREDIT HOURS**

FOUNDATIONS OF ORGANIC CHEM I Prerequisites: CHE\* K121 and CHE\* K122, courses passed with a "C" grade or better. This course is a comprehensive study of organic compounds. Topics covered will include bonding, formulation and molecular shapes of organic molecules, reaction mechanisms, and nomenclature. Reactions of alkanes, cyclolkanes, alkenes, alkynes, and aromatic hydrocarbons will be presented. The laboratory exercises will be integrated with the theory through preparations and reactions. Three-hour lecture; one three-hour lab period each week.

### CHE\* K218 (formerly CHE K212) **4.5 CREDIT HOURS FOUNDATIONS OF ORGANIC CHEMISTRY II**

Prerequisite: CHE\* K217 with a "C" grade or better.

A continuation of CHE\* K217 that covers organic compounds having key functional groups such as alcohols, organic halides, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives, and amines. The classifications of compounds, classic named reactions and stereochemistry will be presented. Laboratory exercises will include preparation and reactions of alcohols, alky halides, ethers, esters, aldehydes, ketones, carboxylic acids, and amines. Three-hour lecture; one three-hour lab each week.

# CHE\* K232 (formerly CHE K105) **4 CREDIT HOURS**

INTRO TO ENVIRONMENTAL CHEM Prerequisite: CHE\* K111 or higher, with a "C"

This course will present the natural cycles of the land, water, and air. It will identify and explain problems stemming from human or industrial impact. Common practices and proposed plans for dealing with environmental problems will be discussed. Laboratory will stress chemical investigation of water, soil, and air samples. Proper techniques for water and soil sampling in field work are included. Three-hour lecture; one three-hour lab each week

### CHE\* K240 (formerly CHE K210) **4 CREDIT HOURS** ANALYTICAL CHEMISTRY

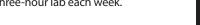
Prerequisites: CHE\* K121; CHE\* K122; MAT\* K186 or higher; all courses passed with a "C" grade or better.

This course features the fundamental techniques and theoretical study in guantitative analysis of elements and compounds. Topics covered will include gravimetric, volumetric, oxidationreduction and potentiometric methods of analysis. Specific laboratory experiments will be performed in the area of quantitative analysis. Three-hour lecture; one three-hour lab period each week.

# CHINESE

### **CHI\* K111 4 CREDIT HOURS CHINESEI**

Chinese I is the first of a two course sequence. It is designed to acquaint students with grammatical structures and vocabulary appropriate for beginning learners. Instruction focuses on develop-



grade or better.



ment of all four skills (speaking, listening, reading and writing) and cultural knowledge. This course will help students develop language skills in Chinese and will help them understand Chinese culture and society.

### CHI\* K112 4 CREDIT HOURS CHINESE II

Prerequisite: CHI\* K111. Chinese II is the second of a two course sequence. It is designed to provide students with the grammatical structures and vocabulary appropriate for the intermediate learners. Instruction continues to focus on the development of all four skills (speaking, listening, reading and writing) and cultural knowledge. This course continues to help students develop language skills in Chinese and will help them understand Chinese culture and society.

# CIVIL ENGINEERING TECHNOLOGY

### CIV\* K101 (formerly CIV K1100) 3 CREDIT HOURS INTRODUCTION TO CIVIL ENGINEERING AND MATERIALS

Corequisite: MAT\* K172 or permission of the program coordinator.

This course will familiarize students to the field of civil engineering and engineering materials. The discussion of engineering materials past and present as well as the function of the civil engineer and how their role influenced history. Engineering materials such as aggregates, concrete, asphalt, steel, wood and other traditional as well as newer materials will be studied. Students will examine the physical properties, the composition, and the many uses of engineering materials in our daily lives. Students will be introduced to the "greening" of civil engineering techniques and methodologies. Sustainable infrastructures as well as our landscapes will be explored. Students will learn about the important role that civil engineers play in our everyday lives and how civil engineers developed our infrastructure from the beginning of time to the present and beyond to meet the challenges of the future. Students will visit several sites throughout the semester and have guest speakers from agencies, private firms and industry.

### CIV\* K146 3 CREDIT HOURS INTRODUCTION TO GIS

Students will learn the basic principles of Geographic Information Systems and explore and evaluate the various data models and structures used in the input management, analysis and output of geographic data. Students will develop hands-on experience through use of a microcomputer based vector system (ArcView GIS), and examine how the nature and character of spatial data can be used in studies of natural and socio-economic environments. This course is equivalent to ENV\* K146 or GIS\* K146.

### CIV\* K150 (formerly CIV K1500) 3 CREDIT HOURS SURVEYING I

*Corequisites: CIV\* K151 and MAT\* K172.* This course introduces the student to the proper use and care of surveying equipment used in making linear and angular measurements, including tapes, transits, theodolites, levels and total stations. This leads to the development of the basic principles of traversing as it relates to boundary surveying.

### CIV\* K151 (formerly K1501) 1.5 CREDIT HOURS SURVEYING I LAB

Corequisites: CIV\* K150 and MAT\* K172. This laboratory will familiarize the student with the proper use and care of the common instruments used by the surveying profession. The use of the equipment is then applied to a boundary traverse.

### CIV\* K200 (formerly K2200) 3 CREDIT HOURS SOILS

Prerequisite: MAT\* K186. Corequisite: CIV\* K201.

The soils course and Lab, the capstone for the Civil and Environmental Engineering Technology programs, will highlight the experiences that the seniors have developed during their tenure in the programs. The many skills including the ability to read and analyze technical drawings, provide written technical presentations and to perform related computations will be realized. This includes the ability to read, analyze and solve technician-level written problems involving all levels of mathematical computations, geometric concepts and figures, and trigonometric functions. The students will learn to analyze the soil structure of a proposed building or construction site and to understand problems of existing structures due to conditions of the ground underneath them. Students in the soils class take soil samples and investigate spoil composition, drainage and grade, among other factors. They are required to interpret the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control Plan. This plan is a required regulation developed by the

Connecticut Department of Environmental Protection Agency. This regulation is an essential document for both the Civil and Environmental Engineering technology students. An understanding and being able to follow the prescribed procedures and guidelines will be expected.

#### CIV\* K201 (formerly CIV K2201) 1 CREDIT HOUR SOILS LAB

Prerequisite: MAT\* K186. Corequisite: CIV\* K200. This course explores the physical testing of soil, which includes determination of density, mechanical grain size analysis, hydrometer grain size analysis, liquid and plastic limits, moisture- density relationship, coefficient of permeability (constant and falling head), direct shear, and consolidation. Design of a septic system for a residential dwelling is taught.

### CIV\* K203 (formerly CIV K2203) 3 CREDIT HOURS HYDRAULICS

Corequisite: MAT\* K186.

This course will familiarize the student with the basic principles of hydraulics as related to the field of civil engineering. The understanding of basic fluid properties and water movement is given. Detail work in hydrostatics, Bernoulli's equation, pressure pipe systems, and uniform open channel flow is given.

### CIV\* K210 (formerly CIV K2210) 3 CREDIT HOURS STORM WATER

Prerequisite: CIV\* K203. Corequisite: CIV\* K203. This course focuses on the methodology used in determining storm water runoff for small urban areas are studied. The theory and logic of both the Rationale Method and the Soil Conservation Service TR-55 are studied in detail. The quantity computations are covered as well as the understanding of gutter analysis. As part of the lab the student will design a storm drain system including a cost estimate for the project.

# CIV\* K211 (formerly CIV K2211) 1 CREDIT HOUR

# STORM WATER LAB

Prerequisite: CIV\* K203. Corequisite: CIV\* K210. In this lab, the methodology used in determining storm water runoff for small urban areas is given. This lab is used as a practical exercise to develop the methods of CIV\* K210 lecture to actual design of a storm water system, including a cost estimate.

### CIV\* K222 (formerly CIV K2222) 3 CREDIT HOURS STRUCTURAL DESIGN

Prerequisite: MEC\* K114. Corequisite: CIV\* K223.

The following topics are covered in this course: principles in the design and detailing of steel beams, columns, tension and compression members and connections; fabrication drawings; concepts in design, detailing, and inspection of reinforced concrete structures.

### CIV\* K223 (formerly CIV K2223) 1 CREDIT HOUR STRUCTURAL DESIGN LAB

Prerequisite: MEC\* K114. Corequisite: CIV\* K222. In this lab, students will be assigned problem sets and projects based on the lecture topics covered in the Structural

### CIV\* K229 3 CREDIT HOURS CONSTRUCTION ESTIMATING

Design lecture.

Prerequisite: Recommended some knowledge of the construction industry. This course examines the roles and responsibilities of a construction estimator. Using both traditional and industry standard digital methods, the course will cover the cost of labor, material, and equipment by unit and by square foot; the fundamentals and effects of scheduling, including critical path, bar and gant charts; and the effect of the global economy on overall construction costs. This course is equivalent to CTC\* K229.

### CIV\* K236 (formerly CIV K2230) 3 CREDIT HOURS WATER RESOURCES ENGINEERING

Corequisite: CIV\* K237.

This course studies the methodology used in determining storm water runoff for small urban areas. The theory and logic of both the Rationale Method and the Soil Conservation Services TR-55 are studied in detail. The quantity computations are covered as well as the understanding of gutter analysis. As part of the lab, the student will design a storm drain system, including a cost estimate for the project. This course is equivalent to ENV\* K245.

# CIV\* K237 (formerly CIV K2231) 1 CREDIT HOUR

#### WATER RESOURCES ENGINEERING LAB Corequisite: CIV\* K236.

This course gives the methodology used in determining storm water runoff for small urban areas. This lab is used as a practical exercise to develop the methods of Water Resources Engineering to actual design of a storm water system including a cost estimate. This course is equivalent to ENV\* K245L.

### CIV\* K250 (formerly CIV K2510) 3 CREDIT HOURS SURVEYING II

Prerequisites: CIV\* K150 and CIV\*K151. Corequisite: CIV\* K251. This course is a continuation of Surveying I and covers boundary location, curves and curved boundary lines, areas, topographic surveys and mapping, connecting traverses, horizontal and vertical alignment of roadways, cross sectioning, profile leveling, and construction staking. This course is cross listed with ENV\* K280.

### CIV\* K251 (formerly CIV K2511) 1.5 CREDIT HOURS SURVEYING II LAB

Prerequisites: CIV\* K150 and CIV\*K151 Corequisite: CIV\* K250. This laboratory is a continuation of the laboratory work begun in Surveying I leading to the development of a boundary and topographic map of the site area. Further, a roadway in play, profile, and cross section is developed and located on the site.

### CIV\* K295 (formerly CIV K2995) 3 CREDIT HOURS COOP WORK EXPERIENCE -CIVIL ENGINEERING

Prerequisite: Permission of the program coordinator. Corequisite: Student must have completed all freshman level technology courses and have a GPA of 2.50 or better. Students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester internship.

# **CRIMINAL JUSTICE**

# CJS\* K100 (formerly CJS\* K107) 3 CREDIT HOURS

**PERSPECTIVES OF CRIMINAL JUSTICE** *Prerequisites: Completion of ESL\* K060 and ESL\* K061, if appropriate.* Students will explore learning styles, develop college success strategies, engage in the practice of academic writing, reading and critical thinking within the context of the criminal justice system. This course satisfies the College's First-Year Experience requirement.

# CJS\* K101 (formerly LAW K111) 3 CREDIT HOURS

**INTRODUCTION TO CRIMINAL JUSTICE** *Prequisite:*  $ENG^* K101$  and  $ENG^* K101S$ *placement* $\infty$  or completion of  $ENG^* K096$ *with a "C#" grade or better.* This course provides an overview of the

criminal justice system in the United States. Students will be exposed to the system's components: law enforcement, courts, and corrections from historical, theoretical, and philosophical perspectives. Students will have the opportunity to interact with criminal justice professionals and be challenged in both reading and writing

### CJS\* K102 (formerly LAW K118) 3 CREDIT HOURS INTRO TO CORRECTIONS

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course is designed to provide an introduction to the history and philosophy that form the basis for current correctional standards and practices. Changes in correctional philosophies, institutional architecture and treatment will be studied in their relationship to change in society. Emphasis will be placed on understanding the development of the components of the current correctional system, i.e. probation, incarceration, parole, work release and home arrest. CJS\* K101 may be taken as a prerequisite or corequisite to this course.

### CJS\* K103 3 CREDIT HOURS INTRODUCTION TO SECURITY

This course presents an introduction to the basic principles of security and loss prevention including, but not necessarily limited too, planning preparations and implementation. These principles are explained and discussed to ensure appreciation for and understanding each as well as correct appropriate application where and when indicated.

### CJS\* K172 3 CREDIT HOURS INTRODUCTION TO TERRORISM AND HOMELAND SECURITY

Prerequisites: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course is a survey of domestic and international terrorism. Students will examine the history of terrorist organizations and the underlying social, political, religious and nationalistic conditions that gave rise to these organizations. The governmental responses in different



countries to these organizations activities will also be reviewed.

### CJS\* K201 (formerly LAW K115) 3 CREDIT HOURS CRIMINOLOGY

Prerequisite: CJS\* K101 or SOC\* K101. Corequisite: ENG\* K101 or ENG\* K101S. This course investigates the relationship between crime and society. Emphasis is placed on understanding theoretical explanations of deviant behaviors from multiple disciplinary perspectives. Students will have the opportunity to use current technologies and practices in assessing crime and crime patterns. They will engage in quantitative reasoning and social science methodologies. Students will explore public policy development and implementation as it relates to crime prevention, control and quality of life issues.

# CJS\* K202 (formerly LAW K160) 3 CREDIT HOURS

**JUVENILE DELINQUENCY** *Prerequisite: CJS\* K101* 

Corequisite: ENG\* K101 or ENG\* K101S. SOC\* K101 recommended. This course presents an introduction to both the structure and process of juvenile justice and delinquency in the United States. The course will examine the changing philosophy and theoretical perspectives of juvenile justice and delinquency by presenting an overview of the social, psychological, and biological explanations of juvenile deviance.

### CJS\* K211 (formerly LAW K211) 3 CREDIT HOURS CRIMINAL LAW I

Prerequisite: CJS\* K101.

*Corequisite:* ENG\* K101 or ENG\* K101S. This course involves comprehensive study of sources, distinctions, and limitations relating to criminal law; the development of criminal law in the United States; the principles of criminal liability; various crimes and their elements; and the criteria considered in determining capacity and defenses. Connecticut Penal Code is used to relate Model Penal Code and Common Law materials specifically to Connecticut. Case studies and briefs are used to emphasize the acts, the mental state, and the attendant circumstances that are necessary ingredients in proving crimes.

### CJS\* K213 (formerly LAW K214) 3 CREDIT HOURS EVIDENCE & CRIMINAL PROCEDURE

*Prerequisite: CJS\* K101. Corequisite: ENG\* K101 or ENG\* K1015.* This course explores the historical background, kinds of evidence, and the development of the rules of evidence. Considered are the hearsay rule and its major exceptions, burden of proof, judicial notice, and presumptions. Students will examine the roles of the judge, jury, and prosecuting attorney. Other areas of study will include the grand jury, prosecution by indictment as well as other court procedures.

#### CJS\* K220 (FORMERLY LAW K213) 3 CREDIT HOURS CRIMINAL INVESTIGATION

Prerequisite: CJS\* K101.

*Corequisite: ENG\* K101 or ENG\* K1015.* This course is designed to make the student aware of the fundamentals of criminal investigation.

The student will learn correct procedures and conduct at the crime scene, how to preserve evidence, and chain of custody. Emphasis is on the responsibility of the first responder. Additionally, students will review documentation, preparation, and testimony in court.

### CJS\* K225 (formerly LAW K216) 3 CREDIT HOURS FORENSIC SCIENCE

Prerequisites: CJS\* K101 and CJS\* K220. This course involves the examination of physical evidence including collecting, identifying, preserving: and transportation it. They will be exposed to the crime laboratory and its capabilities and limitations. Additionally, they will participate in field testing and learn the various purposes of kits and their function and design. Laboratory procedures will be demonstrated depending on existing and available facilities.

### CJS\* K230 3 CREDIT HOURS SECURITY ADMINISTRATION Prerequisite: CJS\* K103.

This course presents an introduction to the administration of a security department and a security program with specific emphasis on three areas: the administrative process (including the management and supervisory elements); security operations; and staffing. Innovative approaches to solving the unique problems encountered in the security field are discussed, as are administrative responsibilities such as training, policy development, planning and budgeting.

### CJS\* K231 3 CREDIT HOURS SECURITY PROCEDURES Prerequisite: CJS\* K103. Designed as an introduction to various

procedures often encountered in the security field. Security Procedures offers a forum for understanding the rationale, intent and purpose of such procedures as lock and key control, access control, searches, bomb threats, and emergency response. Several typical procedures are presented, explained and discussed to ensure appreciation for and understanding of each, as well as correct implementation where and when indicated. Particular emphasis is placed on the background and current status of private security in order to understand the basis and need for appropriate procedures. Liability for acts and the safe handling of weapons are also covered.

### CJS\* K250 (formerly LAW K113) 3 CREDIT HOURS POLICE ORGANIZATION & ADMINISTRATION

Prerequisites: CJS\* K101 and ENG\* K101 or ENG\* K101S.

This course exposes the student to the complexities inherent in the administration of modern law enforcement organizations by presenting and analyzing a variety of management styles and administrative techniques used in such organizations. Students will examine many of the internal and external factors that impact contemporary law enforcement organizations (e.g., federal regulations, political structures, community needs, press, etc.). Students will be exposed to theoretical perspectives, practical applications and designs in an environment that encourages discussion, writing, and networking with local and state agencies.

### CJS\* K253 (formerly LAW K221) 3 CREDIT HOURS INTERPERSONAL DYNAMICS FOR CRIMINAL JUSTICE PROFESSIONAL Prerequisite: CJS\* K101.

Corequisite: Any 200-level CJS course or POL\* K212.

This course is designed to introduce the student to the major theories about interpersonal processes and their relevance to the problems within the criminal justice system. The course content flows from understanding the theories to techniques of interpersonal communication. Emphasis is placed on facilitating effective communication, sensitivity, decision-making and action planning in a multicultural society.

### CJS\* K291 (formerly LAW K218) 3 CREDIT HOURS

**CRIMINAL JUSTICE PRACTICUM** 

*Prerequisite: Permission of the instructor.* This practicum is a college-approved and

<u>Course Descriptions</u>

supervised position related to the student's criminal justice program with public or private law enforcement or security occupations in which basic law enforcement, criminal investigation, probation, or corrections form a principal part of the work of the agency in which field work experience is undertaken. Students are evaluated by members of the college faculty and the staff of the cooperating agency. This is a capstone course.

### CJS\* K294 (formerly LAW K220) 3 CREDIT HOURS CONTEMPORARY ISSUES IN CRIMINAL JUSTICE

Prerequisites: Permission of instructor or Criminal Justice program coordinator. This capstone course is designed for students with a solid foundation of knowledge and exposure to practices in the field of Criminal Justice. The course provides students with opportunities to examine current issues in law enforcement, the judicial system and corrections through discussions with experts in the field. The focus and content of the course will change each year to reflect the changes in political and social thought and their impact on public policy.

### CJS\* K298 3 CREDIT HOURS SPECIAL TOPICS: INTRODUCTION TO VICTIMOLOGY

Prerequisite: None required; CJS\* K101 recommended.

Corequisite: ENG\* K096 or higher. Please note: if completing ENG\* K096 prior to enrolling in CJS\* K298, a grade of "C#" or better is required for registration into this course.

Victimology is a field which studies the circumstance of the occurrence of crimes along with the

characteristics of the victims of crime. The course also studies the effects of crime upon victims and the responses of society, government institutions and the criminal justice system with regard to the needs and goals of victims of crime.

# COMMUNICATION/ SPEECH

### COM\* K109 (formerly ENG K133) 1 CREDIT HOUR SPEECH PRACTICE

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. Students will learn to give a five-minute, organized, extemporaneously delivered oral presentation. Emphasis will be placed on overcoming speech anxiety, acquiring confidence, planning a brief presentation, and practicing speech delivery. This course is an option for completing the oral communication requirement in the General Studies and Liberal Arts and Science degree. It does not substitute for COM\* K173 Public Speaking.

### COM\* K121 3 CREDIT HOURS JOURNALISM

Prerequisite: None required; ENG\* K101 or ENG\* K101S recommended.

This course is designed to give students an introduction to news writing. Students receive practice in writing hard news, feature stories, and editorials, as well as editorial decision-making. Word processing instruction is included. No previous experience necessary. COM\* K121 meets the computer literacy requirement.

### COM\* K173 (formerly ENG K131) 3 CREDIT HOURS PUBLIC SPEAKING

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

Public Speaking introduces students to the principles and basic skills of effective speech communication. Students will research, compose and deliver speeches of increasing complexity and sophistication. The course familiarizes students with the strategies and techniques of successful informative and persuasive public speaking so students gain an understanding of how communication happens and how people participate in public discourses. The course also exposes students to the rhetorical dimensions of many types of public speech and teaches them to be morencritical listeners who can respond rhetorically to complex issues and ideas.

### COM\* K198 3 CREDITS SPECIAL TOPICS: DEMOCRACY AND DISCOURSE

Prerequisite: ENG\* K101 or ENG\* K101S. This course will explore the connections between oral, written, and visual discourse within the context of social and political movements in American history. Emphasis will be placed on the history of civil discourse in America and Theoretical underpinnings of rhetoric, argument and persuasion. Finally, this course will track and analyze contemporary debates and campaigns related to major political elections and social movements.

### COM\* K291 (formerly ENG K250) 3 CREDIT HOURS PUBLICATIONS PRACTICE |

Prerequisite: COM\* K121 or GRA\* K140 or GRA\* K155 or permission of the instructor. This course is designed to train students to produce The Current, the student magazine. This involves researching, interviewing, writing, editing, photography, and proofreading. It also includes all the pre-press work (including digital imaging), which is done on computers, primarily using the Adobe Graphic Studio. Advertising (sales and design) is also part of this course.

# COM\* K292 (formerly ENG K251) 3 CREDIT HOURS

**PUBLICATIONS PRACTICE II** *Prerequisite: COM\* K291.* 

This is a continuation of Publications Practice I. Students will write the more advanced stories for the magazine, as well as edit the newer students' work. ENG\* K251 students will assume more responsibility for page layout and digital imaging, primarily using the Adobe Graphic Studio in this second course.

# COUNSELING

### COU K101 1 CREDIT HOUR LIFE/WORK PLANNING

This 5 week course is for all students making career choices. It is helpful for new students and returning "mature" students who are starting a first career, changing careers, or deciding on a college major. Topics covered will include personal interests and values, skills and abilities, decision making, career exploration, and goal setting.

### COU K122 4 CREDIT HOURS PORTFOLIO DEVELOPMENT

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is designed for adults who have achieved college-level learning through direct life/work experience. Students will have the opportunity to explore past learning experiences and to plan future education goals. Through exercises in learning styles, problemsolving, goal clarification, career-planning, and life experience analysis, each student will develop a Portfolio of Prior Learning. The Portfolio will then be presented to an assessment committee which awards college credit for the learning demonstrated. (Students interested in registering for this course must attend an information ses-





sion prior to registering. Call the Admissions Office for details.)

### COU K130 3 CREDIT HOURS CAREER CHOICES: WORK-LIFE PLAN-NING AND DECISION MAKING

Prerequisite: ENG\* K096 placement. This course is designed to help students maximize their college experience and promote self- development, career awareness, and occupational decision making. Content includes educational success strategies; college resources, planning, and problem solving; career development theory; self-assessment, personality, and career assessment inventories; and education and career planning techniques, resources, and decision making. The course format will be highly interactive and includes lectures, guest speakers, and individual projects.

# **COMPUTER APPLICATIONS**

### CSA\* K101 (formerly CSC K101) 1 CREDIT HOUR

### WINDOWS, THE INTERNET & E-MAIL

This introductory course covers the basics of working with the Windows operating systems, file handling, searching for information on the Internet, and configuring and using e-mail. This course cannot be taken if you have successfully completed CSA\* K105.

### CSA\* K105 (formerly CSC K1175) 3 CREDIT HOURS INTRODUCTION TO SOFTWARE APPLICATIONS

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a grade of "C#" or better. This course introduces some popular software packages currently being used in industry, business, and government such as Microsoft Word, Excel, Access, and PowerPoint. A small amount of time will be devoted to the Windows operating system environment. Recent versions of the software packages will be used. Strong reading, good writing, and basic math skills are required. Prior computer usage experience (e.g. keyboard and mouse actions, file and folder management, Internet browsing) is assumed. Digital learning technologies will be used throughout the course.

### CSA\* K135 3 CREDIT HOURS SPREADSHEET APPLICATIONS

Prerequisites: ACC\* K125 or BBG\* K115 or CSA\* K101 or CSA\* K105; MAT\* K095 or MAT\* K095I or appropriate placement∞ through multiple-measure assessment process; or permission of the instructor. This course is designed to deliver the beginning, intermediate, and advanced capabilities of Microsoft Excel in a handson teaching environment. Topics range from the basics of creating, editing, and formatting a spreadsheet; creating charts; absolute and relative addressing in formulas and functions; and Object Linking and Embedding to creating and using a worksheet database list management; linking workbooks; creating templates; and recording macros.

### CSA\* K205 (formerly CSC K1176) 3 CREDIT HOURS ADVANCED APPLICATIONS

Prerequisite: CSA\* K105 or BBG\* K115 or permission of instructor.

This course covers some popular software packages currently being used in industry, businesses, and government such as Microsoft Word, Excel, Access, and Power Point. Each package will be covered in greater depth than CSA\* K105 Computer Applications I, and will include more advanced features such as using VBA to write macros.

# **COMPUTER SCIENCE**

### CSC\* K108 (formerly CSC K1142) 4 CREDIT HOURS

INTRODUCTION TO PROGRAMMING Prerequisites: Familiarity with Microsoft Windows operating system and basic word processing; MAT\* K095 or MAT\* K095I with a "C#" arade or better.

This course presents a broad introduction to computer science including computer design, programming, information processing and algorithmic problem solving. It is intended as a foundation for beginning computer science students and others seeking to use computers as a tool in business, engineering, science and other disciplines. In addition, this course provides an introduction to high level computer programming language. The student will learn to design, develop and implement programs to solve various data processing problems. Topics covered include control structures, functions and parameter passing, file I/O, and an introduction to arrays and structures. In the lab, the student will use the computer to create and run programs to solve

problems discussed in the lecture portion. Three lecture hours, one two-hour lab.

# CSC\* K207 (formerly CSC K2278) 4 CREDIT HOURS

**INTRODUCTION TO VISUAL BASIC** *Prerequisite: CSC\* K108.* 

This course is designed to provide the student with rapid application development technology using Microsoft Visual Basic software. Topics include GUI controls, event handling, graphics, exception handling, file I/O, data base access, and an introduction to ASP.NET applications and XML web services. Three lecture hours, one two-hour lab.

#### CSC\* K208 (formerly CSC K2288) 4 CREDIT HOURS ADVANCED VISUAL BASIC

Prerequisite: CSC\* K207.

This course is designed to provide the student with object oriented programming using Visual Basic.NET to create Windows applications, console applications, web applications, and web services. Topics include inheritance, polymorphism, graphics, exception handling, multithreading, file I/O, database access, ASP.NET, web forms, web controls, and networking. Three lecture hours, one two-hour lab.

### CSC\* K215 4 CREDIT HOURS OBJECT\_ORIENTED PROGRAMMING WITH C++

Prerequisite: CSC\* K108.

This course completes the introduction to programming in the C++ language. Object Oriented Programming concepts include objects and classes, instantiation, encapsulation, inheritance, polymorphism, overloading, pointers and class libraries. Additional topics include structures, recursion, namespaces, multi-file programming, and random access files. proficiency in structured programming at the level of CSC\* K108.

# CSC\* K216 (formerly CSC K2220) 4 CREDIT HOURS

### **INTERMEDIATE C++ PROGRAMMING** *Prerequisite: CSC\* K108.*

This course is designed to provide the student with the fundamentals of object oriented programming using the language of  $C \infty \infty$ . Topics include inheritance, polymorphism, operator overloading, pointers, class templates, function templates, and exception handling. Some of these topics will be applied to Windows GUI programming with the NET library. Three lecture hours, one two-hour lab.

### CSC\* K218 (formerly CSC K2285) 4 CREDIT HOURS C# PROGRAMMING

Prerequisite: CSC\* K108.

This course is designed to provide the student with an introduction to the .NET platform and object- oriented programming using the language of C#. Topics include console applications, windows applications, ASP.NET web applications, web services, inheritance, polymorphism, event handling, graphics, delegates, multi-threading, exception handling, file I/O, and networking. Three lecture hours, one two-hour lab.

### CSC\* K223 (formerly CSC K2276) 4 CREDIT HOURS JAVA PROGRAMMING I

# Prerequisite: CSC\* K108.

This course is designed to provide the student with the fundamentals of object oriented programming using the language of JAVA. Topics include applets, applications, inheritance, polymorphism, GUI components, event handling, graphics, multi-threading, exception handling, multi-media, file I/O, and networking. Three lecture hours, one two-hour lab.

### CSC\* K224 (formerly CSC K2276) 4 CREDIT HOURS

# JAVA PROGRAMMING II

Prerequisite: CSC\* K223.

This course is a continuation of Java Programming I featuring J2EE software development. The course will focus more on the middle and back-end tier of the three tier model. Topics include Servlets, Java Server Pages, JDBC, multi-threading, networking, applets with CGI, Java Network Launch Protocol, Java Beans, and an introduction to Enterprise Java Beans. Three lecture hours, one two-hour lab.

### CSC\* K233 (formerly CSC K1220) 4 CREDIT HOURS DATABASE DEVELOPMENT I

Prerequisite: CSC\* K108.

The main objective of this course is to teach students the fundamental concepts underlying the current database technology. The course will cover the concepts behind the latest database technology the relational database model. The course will attempt to solidify the concepts by exposing the student to a specific DATABASE Management System (DBMS) that employs the relational model, and by introducing the student to one or more query database languages. Three lecture hours, one two-hour lab.

### CSC\* K234 (formerly CSC K2120) 4 CREDIT HOURS DATABASE DEVELOPMENT II Prerequisite: CSC\* K233.

In this course students will extend their knowledge of relational database programming by developing programming objects directly in the database (stored procedures, functions, data types and triggers) using the traditional SQL language as well as .NET languages. Students will also explore the use of the XML data type for the storage of XML documents and validation of these documents using XML schemas. OLAP (On-Line Analytical Processing) and Data Mining will also be explored. Three lecture hours, one two-hour lab. The lab is the hands-on component to Database II and will feature database programming object development using the SQL Server database management system.

### CSC\* K235 4 CREDIT HOURS DATABASE DEVELOPMENT III Prerequisite: CSC\* K233.

This course will review SQL and will focus on advanced topics including logical query processing, query tuning, new query capabilities (sub queries, table expressions and ranking functions) and DBA features. Three lecture hours, one two-hour lab. The lab is the hands-on component to Database III and will feature the SQL Server database management system.

### CSC\* K241 (formerly CSC K2232) 4 CREDIT HOURS DATA STRUCTURES & ALGORITHMS

Prerequisite: CSC\* K216. Students will acquire the facility to both design and implement computer programs using a procedure oriented language. The course will emphasize advanced programming techniques utilizing DATA STRUCTURES (stacks, linked, list, binary trees, etc.) and recursive algorithms. Three lecture hours, one two-hour lab.

### CSC\* K255 (formerly CSC K2260) 4 CREDIT HOURS SYSTEMS ANALYSIS DESIGN & DEVELOPMENT

*Prerequisite: CSC\* K108 or permission of the instructor.* 

This course introduces students to the principles and methods of systems analysis and design. Case studies and individualized student projects demonstrate and give students experience in systems analysis and design. The approach emphasizes attainment of project goals while taking into account constraints with respect to time, cost, personnel, equipment, etc.

### CSC\* K283 (formerly CSC K2238) 4 CREDIT HOURS INTRODUCTION TO ASSEMBLER

Prerequisite: CSC\* K108.

This course is designed to provide students with an introduction to machine organization and machine language by learning to program in assembly language. Topics include macros, external subroutines, parameter passing conventions, linking assembly language modules to C<sup>000</sup> programs, machine instruction encoding, hardware port I/O, terminate and stay resident utilities, interrupt handlers, and the floating point unit. Three lecture hours, one two-hour lab.

### CSC\* K295 (formerly CSC K2995) 3 CREDIT HOURS CO-OP ED/WORK EXPERIENCE

Prerequisite: Permission of the program coordinator. Corequisites: Student must have completed all freshman level technology courses and have a GPA of 2.50 or better. Students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester internship.

# **COMPUTER TECHNOLOGY**

# CST\* K141 (formerly CSC K1215) 4 CREDIT HOURS

**COMPUTER HARDWARE MAINTENANCE** Prereauisite: None reauired. Recommended BBG\* K115 or CSA\* K105 or equivalent. This course will provide the principles of maintaining and troubleshooting the personal computer's hardware. The course will cover computer hardware, associated peripherals, configuration, optimization, and repair from the PC technician's point of view. Students will develop critical thinking and troubleshooting skills through emphasis on hands-on experience in installing, maintaining, and processing various problems with computer hardware. This course will begin preparing the student for the CompTIA Core Hardware Examinations for the A∞ certification.





### CST\* K153 (formerly CSC K1230) 4 CREDIT HOUR S WEB DEVELOPMENT AND DESIGN I

Prerequisite: None required. Recommended BBG\* K115 or CSA\* K105 or equivalent. This course offers a preliminary treatment of Web Design and Development concepts, with programs that yield visible and audible results in Web pages and Webbased applications. The course includes an introduction to Microsoft Internet Explorer and the World Wide Web, effective Web page design practices, XML, HTML, XHTML, web graphics, authoring software, and client- and server-side scripting. The course includes detailed discussion of graphics formats, the appropriate use of graphics and text, font selection, use of meta-tags, navigation techniques, and methods of optimizing web sites.

### CST\* K175 (formerly CSC K1183) 4 CREDIT HOURS NETWORK ADMINISTRATION AND SUPPORT

Prerequisite: None required. Recommended BBG\* K115 or CSA\* K105 or equivalent. The student will acquire detailed knowledge of networking technology, including basic network structure; the characteristics of star, bus, mesh, and ring topologies, and their advantages and disadvantages; the characteristics of segments and backbones; identification of the following: the major network operating systems, including Microsoft Windows NT, Novell NetWare, and Unix; the clients that best serve specifics network operating systems and their resources; the directory services of the major network operating systems; and general networking and communications security. It is recommended but not required that this course be taken first.

### CST\* K176 (formerly CSC K2283) 4 CREDIT HOURS INTERNET TECHNOLOGIES

Prerequisite: None required. Recommended BBG\* K115 or CSA\* K105 or equivalent. This course surveys the various technologies that form and make the Internet work. It will prepare students to understand current technologies and make intelligent business decisions concerning the Internet. The student will acquire detailed knowledge of a wide range of internet basics, the knowledge and skills required to use and update client software, and to assist in the administration of internet/intranet sites. Additionally, the student will acquire detailed knowledge of programming related terms and the differences between popular client and server programming language.

### CST\* K177 (formerly CSC K2284) 4 CREDIT HOURS SERVER TECHNOLOGIES

Prerequisite: None required. Recommended BBG\* K115 or CSA\* K105 or equivalent. Students will acquire advanced-level technical knowledge of server issues and technology, including installation, configuration, upgrading, maintenance, and troubleshooting and disaster recovery. Additionally, students will acquire advanced knowledge of networking hardware, detailed knowledge of programming related terms and the differences between popular client and server programming language.

### CST\* K232 (formerly CSC K1224) 4 CREDIT HOURS COMMUNICATIONS & NETWORKING

Prerequisite: None required. Recommended BBG\* K115 or CSA\* K105 or equivalent. Students will become knowledgeable about basic internetworking concepts, including the use of internetworking software applications. Topics include routing/switching hardware, security, distributed client/server applications and architecture, intranets and intranet servers and browsers, networks and network servers, LANs/WANs, internetworking technologies, the OSI reference model for networking protocols, routing and routing algorithms, TCP/IP implementation, frame relay, FDDI, X-25, ISDN services, the Internet, and the World Wide Web. The course focuses on the Internet, the World Wide Web, and intranets and related software applications.

### CST\* K241 (formerly CSC K1215) 4 CREDIT HOURS SYSTEM SOFTWARE MAINTENANCE

Prerequisite: CST\* K141 or permission of instructor.

This course will cover the principles of maintaining the personal computer's operating systems software. The course will cover installing, configuring, upgrading, diagnosing, and troubleshooting computer operating system software from the PC technician's point of view. Students will develop critical thinking and troubleshooting skills though an emphasis on hands-on experience in installing, maintaining, and processing various problems with computer desktop operating system software. This course will be preparing the student for the CompTIA Operating System Technologies Examination for the A  $\infty$  certification.

### CST\* K252 (formerly CSC K2230) 4 CREDIT HOURS WEB DEVELOPMENT AND DESIGN II

Prerequisite: CST\* K153 or permission of the instructor.

The course will focus on the use of DHTML in conjunction with style sheets, both CSS and XSLT, to enhance Web page content. Client-side scripting to support DHTML and server-side scripting will be covered, introducing the basic concepts of computer programming techniques. Server database access and XML for web transactions will be introduced. The course will also introduce the process of requirements gathering, documentation, design and implementation of a web site, while introducing the concepts of the infrastructure used to support web based applications. The course will require each student to build a web site, using the skills and tools taught in the course.

### CST\* K253 (formerly CSC K2236) 4 CREDIT HOURS WEB E-COMMERCE

Prerequisite: CST\* K153 or permission of the instructor.

This course examines the essentials of electronic commerce including the business-to-consumer (B2C) and the business-to-business (B2B) categories as well as the transactions and processes that support selling and purchasing activities. B2C topics include the addition of server side programming (e.g. shopping cart software) to traditional web site design for the support of order entry processing, and database technology to support both product catalogs and transactions for order fulfillment. B2B topics include electronic purchase order and invoicing processes needed to implement electronic data interchange. The role of XML in these activities, electronic commerce security, electronic payment systems, and international, legal and ethical issues are examined. A case-study approach is used which analyzes business examples to provide real-world experience.

### CST\* K275 (formerly CSC K2289) 4 CREDIT HOURS INFORMATION SECURITY

Prerequisite: None required. Recommended BBG\* K115 or CSA\* K105 or equivalent. Students will become knowledgeable of basic network security. Topics include general security concepts, including authentication methods along with common network attacks and how to safeguard against them; communication security, including remote access, e-mail, the Web, directory and file transfer, and wireless data; infrastructure security, including various network devices and media, and the proper use of perimeter topologies such as DMZs, extranets, and intranets to establish network security; cryptography basics, including the differences between asymmetric and symmetric algorithms, and the different types of PKI certificates and their usage; operational/organizational security, including its relationship to physical security, disaster recovery, and business continuity; and computer forensics.

# CONSTRUCTION TECHNOLOGY

### CTC\* K120 3 CREDIT HOURS FUNDAMENTALS OF CONSTRUCTION MANAGEMENT

Introduces the fundamental aspects of construction management to students in a broad format, covering topics that include understanding the design vision, establishing team expectation, project planning, scheduling, estimating, organizational forms, contracts and risk management.

### CTC\* K229 3 CREDIT HOURS CONSTRUCTION ESTIMATING

Prerequisite: Recommended some knowledge of the construction industry. The course examines the roles and responsibilities of a construction estimator. Using both traditional and industry standard digital methods, the course will cover the cost of labor, material, and equipment by unit and by square foot; the fundamentals and effects of scheduling, including critical path, bar and gant charts; and the effect of the global economy on overall construction costs. This course is equivalent to CIV\* K229.

# **DENTAL HYGIENE**

### DNT\* K105 1 CREDIT HOUR INTRODUCTION TO DENTAL HYGIENE I

Prerequisite: ENG\* K096 placement∞. Corequisite: None required. ENG\* K096 and CSA\* K105 recommended.

Please note: if completing ENG\* K096 prior to enrolling in DNT\* K105, a grade of "C#" or better is required for registration into this course.

This course provides students with a survey of contemporary issues encountered by health care professionals. Emphasis is placed upon personal oral self care, dental specialties, ethical and legal aspects of dentistry, an introduction to oral pathology, disease transmission and infection control, principles and techniques of disinfection and sterilization, and an introduction to the dental hygiene treatment appointment.

# DNT\* K106 1 CREDIT HOUR I NTRODUCTION TO DENTAL HYGIENE II

Prerequisite: DNT\* K105. This course is a continuation of Dental Hygiene I and provides students with a survey of contemporary issues encountered by health care workers. Emphasis is placed on professional standards, health promotion, disease prevention, and ethical issues that are encountered by dental hygienists.

# **EARTH SCIENCE**

# EAS\* K110 4 CREDIT HOURS THE EARTH SCIENCES

Corequisite: ENG\* K096. Please note: if completing ENG\* K096 prior to enrolling in EAS\* K110, a grade of "C#" or better is required for registration into this course.

In this course, scientific studies of earth systems will be discussed. The topics to be covered will include astronomy, meteorology, geology, and oceanography. The fundamental principles of all four disciplines will be explored. This course is designed for students majoring in education or business, or any student desiring to meet the lab science requirement for the LAS degree. Some fieldwork is involved. Three hours lecture, three hours lab each week.

# EARLY CHILDHOOD EDUCATION

### ECE\* K101 (formerly CDV K111) 3 CREDIT HOURS INTRODUCTION TO EARLY CHILDHOOD EDUCATION

Prerequisite: ENG\* K096 placement∞ or permission of the program coordinator based on ECE work experience.

This course introduces students to a study of the historical, anthropological, psychological, philosophical, and social perspectives of early care and education for children ages 0-8. The course acquaints students with trends in educational settings including the organization, history, and governance of American schools. The course includes the study of child development, learning models, and the multiple roles in the early childhood education profession. Observations of early childhood programs will be required.

### ECE\* K103 (formerly CDV K129) 3 CREDIT HOURS CREATIVE EXPERIENCES/CHILDREN

Prerequisite: ENG\* K096 placement : ECE\* K101 and ECE\* K182 recommended. This course is designed to study the concept of creativity and the artistic process as it applies to art and play and for young children. Theories and research on aspects of play and the Arts will be applied. The course will highlight teaching methods and curriculum development in visual arts, spontaneous play, theater, and dramatic play.

### ECE\* K106 (formerly CDV K132) 3 CREDIT HOURS MUSIC AND MOVEMENT FOR CHILDREN

Prerequisite: ENG\* K096 placement∞; ECE\* K101 and ECE\* K182 recommended. This course is designed for students to acquire skills to plan and implement creative music and movement experiences for children from infancy to age eight. Areas of exploration will include singing, listening to music, rhythmic activities, multicultural music, dance, movement, and the daily integration of music and movement in classrooms. All students will build a repertoire of music and movement education experience.

# ECE\* K109 (formerly CDV K130) 3 CREDIT HOURS

**SCIENCE & MATH FOR CHILDREN** 

Prerequisite: ENG\* K096 placement∞; ECE\* K101 and ECE\* K182 recommended. In this course, students will acquire an understanding of the materials and methods of working with young children. The focus will be on math and science and their integration into the early childhood curriculum. Emphasis will be placed on understanding these areas from a child development perspective. Active participation working with children will be required.

### ECE\* K141 (formerly CDV K139) 3 CREDIT HOURS INFANT/TODDLER GROWTH & DEVELOPMENT

Prerequisite: ENG\* K096 placement∞; ECE\* K101 and ECE\* K182 recommended. In this course, students will examine the growth and development of the child from birth to 3 years. Topics explored will include the development of the brain, attachment, emotions, cognition, social interactions, language, and motor skills. Observations of infant and toddlers in social settings will be required for this course.



### ECE\* K150 (formerly CDV K137) 3 CREDIT HOURS INTRODUCTION TO EARLY CHILDHOOD SPECIAL ED

Prerequisite:  $ENG^*K101$  or  $ENG^*K101S$ placement $\infty$  or completion of  $ENG^*K096$ with a "C#" grade or better;  $ECE^*K101$  and  $ECE^*K182$  recommended.

This course introduces students to the role of special education as well as its basic principles and practices. Among the topics addressed are laws, regulations, and ethical codes governing special education; political, social and philosophical issues in special education; planning, curriculum, classroom management and instructional methods in special education; the roles of the teacher and instructional paraprofessionals in special education; and the process of making decisions about the special education of individual children.

### ECE\* K176 (formerly CDV K215) 3 CREDIT HOURS HEALTH, SAFETY & NUTRITION

Prerequisite: ENG\* K096 placement∞; ECE\* K101 and ECE\* K182 recommended. The relationship between health, safety and nutrition and child development will be examined. Emphasis will be on the strategies needed to implement a safe, healthy and nutritionally sound program. Community agencies and resources that benefit the children through these domains will be explored through community service experiences.

### ECE\* K180 3 CREDIT HOURS CREDENTIAL PREPARATION

*Prerequisite: None required; ECE\* K101 and ECE\* K182 recommended.* 

This course is designed for childcare providers who are preparing for their Child Development Associate (CDA) Credential through the Council for Professional Recognition in Washington, D.C. Students must be working or volunteering in a child care program and have completed at least 250 hours of work in this setting. The course will assist students an understanding of the nationally recognized Child Development Associate (CDA) and provide the foundation for acquiring the skills required for a CDA. This course will focus on the six CDA Competency Goals and thirteen Functional Areas and will assist students in the preparation of the required CDA resource file, parent opinion guestionnaires, and CDA assessment observation instrument.

### ECE\* K182 (formerly CDV K117) 3 CREDIT HOURS CHILD DEVELOPMENT

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better or permission of the program coordinator based on ECE work experience.

This course presents the basic principles, current research, and traditional theories of child development, from the prenatal period to the onset of adolescence, with an emphasis on the earlier years of childhood. Students will be guided in the development of a scientific and objective attitude toward the interpretation of child behavior and will study various methods of conducting research in child development. They will observe children and analyze their behavior in each of the following

areas: physical abilities and motor skills, cognitive abilities, as well as social and emotional development.

### ECE\* K190 3 CREDIT HOURS ECE BEHAVIOR MANAGEMENT

Prerequisites: ENG\* K101 or ENG\* K101S; ECE\* K101; ECE\* K182; or permission of the instructor.

This course is designed for early childhood education teachers, child care providers and directors. It will review the many behavior management and discipline strategies that are available to be used with young children. Discipline approaches that go beyond rules and punishment will be examined. Students will study and create an environment that leads to respect and self-discipline. Participants learn to analyze teaching/ management styles so as to be able to incorporate the best techniques to help lead children to self-control.

### ECE\* K206 (formerly CDV K280) 3 CREDIT HOURS ADMINISTRATION & SUPERVISION OF

**EARLY CHILDHOOD PROGRAMS** Prerequisite: ENG\* K101 or K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better; ECE\* K101 and ECE\*

K182 recommended.

This course will focus on administering an Early Childhood Program. It will explain and discuss the leadership role in administration and supervision of private, public, and federally funded schools. It will look at establishing the program's framework, the program's operational systems, and the overall implementation of quality early childhood personnel standards. This survey course is designed to meet the Connecticut Directors Credential.

### ECE\* K210 (formerly CDV K126) 3 CREDIT HOURS OBSERVATION PARTICIPATION & SEMINAR

*Prerequisite:* ENG\* K101 or ENG\* K101S; ECE\* K101; ECE\* K182; or permission of the instructor.

The course emphasizes techniques and strategies for recording children's (ages 0-8) behavior accurately and objectively through portfolio assessment. The course reviews CT Statewide Department of Education benchmarks and performance standards, and identifies the methodologies best used for assessment. The importance of child development from birth to eight years is emphasized and used in observation of children in a childcare setting, preschool programs, and K-3 classes. Observations of early childhood programs will be required.

### ECE\* K215 (formerly CDV K219) 3 CREDIT HOURS THE EXCEPTIONAL LEARNER

Prerequisites: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better; ECE\* K101; ECE\* K182.

This course provides an overview of the study of the exceptional child with an emphasis on the history, laws, concepts, practices, and terminology used by professionals in the field within inclusive settings. Causes, characteristics, needs, and implications of the intellectual, motor and sensory handicaps will be discussed. Additional topics will be addressed including diversification, multiculturalism, and parenting. Observations of early childhood programs will be required.

### ECE\* K222 3 CREDIT HOURS METHODS AND TECHNIQUES IN EARLY CHILDHOOD EDUCATION

Prerequisite: ENG\* K101 or ENG\* K101S; ECE\* K101; ECE\* K182; or permission of the instructor.

The course is designed for those students who have an understanding and knowledge of child development and children. The course will review the philosophical, sociological and pedagogical foundations of education and their applications in early childhood education settings. Students will apply actual principles of learning to the analysis of instructional approaches and curriculum development. This course will expose students to the fundamentals of classroom strategies, effective teaching tools and techniques for children ages 0-8. Observations of early childhood programs will be required. ECE\* K231 (formerly CDV K135)

### 3 CREDIT HOURS EARLY LANGUAGE & LITERACY DEVELOPMENT

Prerequisite: ENG\* K101 or ENG\* K101S; ECE\* K101; ECE\* K182; or permission of the instructor.

The course introduces students to language and literacy development in the young child from birth to eight years old. Students will explore the early childhood language arts curriculum including speaking, listening, writing, and reading skills. An emphasis will be on the influence of child development milestones on an emerging literacy development. This course will also include experience in the creation of a literacy-rich environment that engages children in developmentally- appropriate language areas. Observations of early childhood programs will be required.

### ECE\* K241 3 CREDIT HOURS METHODS AND TECHNIQUES FOR INFANTS/TODDLERS CARE

Prerequisite: ENG\* K101 or ENG\* K101S; ECE\* K101; ECE\* K182; or permission of the instructor. ECE\* K141 recommended. In this course, students will be introduced to the concept of curriculum for infants and toddlers. Several curriculum models will be explored. Students will learn ways to interact and stimulate children under two. Learning games, language activities, music, movement, and dramatic play are some of the areas that will be studied. Developmentally appropriate practices will be reviewed. Topics explored will include curriculum benchmarks, development of the brain and attachment. Observations of early childhood programs will be required.

### ECE\* K252 3 CREDIT HOURS CHILDREN ON THE AUTISM SPECTRUM

Prerequisite(s): ENG\* K101 or ENG\* K101S; ECE\* K101; ECE\* K182; or permission of the instructor. ECE\* K215 or PSY\* K245 recommended.

This course introduces students to the application of a variety of autism teaching strategies and philosophies which may be applied within the context of a school, home or child care setting. Specific Diagnostic categories of ASD (Asperger's Disorder, Pervasive Developmental Disorder, Autism...) will be identified and aligned with both traditional and nontraditional strategies for engagement, learning and relationships. The identification process of ASD, general causes and symptoms and incidences of this disorder will be outlined before discussing classroom strategies. Samples of these strategies will include ABA (Applied Behavioral Analysis) DIR Model (Developmental, Individual-Differences, Relationship Based and Floor Time.

### ECE\* K295 6 CREDI HOURS STUDENT TEACHING PRACTICUM

Prerequisite: Completion of seven ECE courses or permission of ECE advisor; letters of recommendation; GPA of 3.0 recommended.

Guided observation, participation and supervised student teaching in NAEYC accredited centers or public schools grades K-3. The purpose of student teaching is to enable the student to apply child development theory and methodologies in a learning environment with children. Students will manage a classroom independently, plan, organize, implement and evaluate classroom activities. Students will complete a minimum of 200 hours of student teaching. Weekly seminars devoted to issues in early childhood education, curriculum prep and the experience of the student teacher will extend the individuals learning experience. This course also requires 3 hours of class time each week. Please note the following: Students must fulfill specific health requirements mandated by CT State Licensing or SDE, including annual physical and TB requirements. Additionally, students are required to complete a criminal record check prior to the semester. These expenses must be assumed by the student.

# **ECONOMICS**

# ECN\* K101 (formerly ECO K111) 3 CREDIT HOURS

**PRINCIPLES OF MACROECONOMICS** Prerequisite:  $ENG^*K101$  or  $ENG^*K101S$ placement $\infty$  or completion of  $ENG^*K096$ with a "C#" grade or better.

This course introduces students to the basic concepts of the economic system. The first semester is primarily macroeconomics, with the emphasis on the economic thought process. Discussion of money and banking, national income, fiscal measures, and stabilizing the economy are all included.

# ECN\* K102 (formerly ECO K112) 3 CREDIT HOURS

PRINCIPLES OF MICROECONOMICS Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course introduces students to microeconomics theory, with a focus on understanding how business, social, and policy decisions are made. The basic theories of distribution of income, international economics, labor, and comparative economic systems are studied.

### ECN\* K250 3 CREDIT HOURS MONEY AND BANKING

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" or better, and ECN\* K101. This course examines the role that money, interest rates and financial intermediaries (in particular, the banking system) play in the operation of the U.S. economy. The aim of this course is to give students an overview of the U.S. financial system and an understanding of the theory and practice of monetary policy in the United States.

### ECN\* K296 (formerly ECO K298) 3 CREDIT HOURS TEACHING ASSISTANTSHIP IN ECONOMICS

Prerequisite: At least two prior courses in economics and/or permission of the instructor. In this assistantship, students will assist a faculty member in conducting an academic course offered in the field of economics. Students may lead discussion groups, work with individual students, organize field trips, make presentations, and/or do other work (to be arranged by faculty member).

# **EDUCATION**

### EDU\* K110 3 CREDIT HOURS TEACHING IN THE 21ST CENTURY

*Prerequisite: ENG\* K101 or ENG\* K101S or permission of the instructor or program coordinator.* 

This course is designed for students considering education as a major and teaching as a profession. Students will have an opportunity to experience primary, middle and secondary education through site visits, guest speakers and varied media. Students will obtain a systematic body of knowledge

from which they can develop a repertoire of teaching practices to meet the learning needs of students with diverse learning styles, developmental needs, cultural and socioeconomic backgrounds.

# **ELECTRICAL ENGINEERING**

# **TECHNOLOGY**

### EET\* K105 3 CREDIT HOURS ELECTRIC CIRCUITS & SYSTEMS

Prerequisite: MAT\* K095 or MAT\* K0951. Corequisites: EET\* K106 and MAT\* K137 or MAT\* K137S.

This course provides an introduction to the basic concepts of DC and AC electric circuits. Voltage, current, resistance, energy, and power relationships are introduced. Circuit analysis of basic series and parallel circuits is covered. Instruments and techniques of electrical measurement for both DC and AC circuits are also discussed.

### EET\* K106 1 CREDIT HOUR ELECTRIC CIRCUITS & SYSTEMS LAB

Prerequisite: MAT\* K095 or MAT\* K095I. Corequisite: EET\* K105.

This lab course will supplement the course Electric Circuits & Systems. Students will apply the concepts learned in the classroom and gain practical hands-on experience making electrical measurements using a variety of test instruments.

### EET\* K115 (formerly EET K1103) 1.5 CREDIT HOURS ELECTRICAL GRAPHICS LAB

*Corequisites: EET\* K105/106.* Students will learn basic electronic drafting techniques used to produce schematic diagrams, block and logic diagrams, printed circuit drawings, and chassis drawings. Construction of the studentdesigned printed circuit assembly is included.

### EET\* K116 (formerly EET K1106) 3 CREDIT HOURS

ELECTRIC NETWORK ANALYSIS

Prerequisite: MAT\* K095 or MAT\* K095I. Corequisites: EET\* K117 and MAT\* K137 or MAT\* K137S.

This course is designed for any military personnel who have the equivalent of 4 semester hours of AC & DC circuits. This course, in conjunction with military credits, will give the student credit for EET\* K110, EET\* K111, EET\* K112, and EET\* K113. The emphasis of this course will be on circuit analysis techniques such as Thevenin's Theorem, Norton's Theorem, Superposition Theorem, Loop, Mesh, and Nodal Analysis.

### EET\* K117 (formerly EET\* K1107) 1 CREDIT HOUR

### ELECTRIC NETWORK ANALYSIS LAB

Prerequisite: MAT\* K095 or MAT\* K095I. Corequisites: EET\* K116 and MAT\* K137 or MAT\* K137S.

Students will be assigned laboratory exercises to achieve the goals of EET\* K116.

### EET\* K119 3 CREDIT HOURS ADVANCED CIRCUITS AND SYSTEMS

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S.

Corequisites: EET\* K120.

This course develops the concepts of DC and AC electric circuits introduced in Electric Circuits and Systems. More advanced configurations and applications of DC and AC principles are covered, including: transient behavior of capacitive and inductive circuits; power considerations in industrial AC system; network theorems, such as superposition and Thevenin's theorem applied to DC, AC, and mixed circuits; transformers, three phases circuits, and filters. Electrical Engineering Technology majors are expected to use this course to complete a year of study of circuits and systems.

### EET\* K120 1 CREDIT HOUR ADVANCED CIRCUITS AND SYSTEMS LAB

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S.

Corequisites: EET\* K119.

This course will supplement the course Electric Circuits and Systems. Students will apply the concepts learned in the classroom and develop their skills in making electrical measurements using a variety of test instruments.

### EET\* K124 (formerly EET K1112) 3 CREDIT HOURS MICRO COMPUTER SYSTEM ANALYSIS

Corequisite: EET\* K125.

This course is designed for military personnel who have the equivalent of 4 semester hours of digital electronics.

This course, in conjunction with military credits, will give the student credit for EET\* K254, EET K2111, EET\* K258, and EET\* K259. The emphasis of this course will be on using a microprocessor in a micro-computer system.

### EET\* K125 (formerly EET K1113) 1 CREDIT HOUR MICRO COMPUTER SYSTEM ANALYSIS LAB

*Corequisite: EET\* K124.* Students will be assigned laboratory exercises to achieve the goals of EET\* K124.

### EET\* K134 (formerly EET K1120) 3 CREDIT HOURS ELECTRONICS I

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S.

Corequisites: EET\* K135. This course is an introduction to the internal physical behavior of solid state electronic devices. Conduction in metals and semiconductors is considered. The characteristics of junction diodes, bipolar transistors, and field effect transistors are studied. Biasing and thermal stabilization requirements and techniques are developed. Models, equivalent circuits, and applications are emphasized.

### EET\* K135 (formerly EET K1121) 1 CREDIT HOUR ELECTRONICS I LAB

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S.

Corequisites: MAT\* K186.

This course supports Electronics I by providing the student with practical experience in the handling and measurement of semi-conductor devices. Computer simulation and bench measurement experiments will be performed in studying the operational characteristics of basic semi-conductor devices.

### EET\* K140 (formerly EET K1400) 3 CREDIT HOURS

# ENERGY CONVERSION SYSTEMS

Prerequisites: EET\* K105/106. Corequisite: EET\* K141.

This course covers topics in the use of electrical machinery to convert energy from mechanical to electrical form and the converse. Included are DC machines, AC machines, stepper motors, and basics of starters and controllers.

### EET\* K141 (formerly EET K1401) 1 CREDIT HOUR

**ENERGY CONVERSION SYSTEMS LAB** *Prerequisites: EET\* K105/106. Corequisite: EET\* K140.* Students will be assigned laboratory

experiments that provide hands-on experience, with lab versions of the machinery discussed in the lecture part of the course.

### EET\* K144 (formerly EET K2104) 3 CREDIT HOURS FUNDAMENTALS ELECTRICAL CIRCUITS AND MACHINES

Prerequisite: MAT\* K186. Corequisite: EET\* K145. This course covers the basics of DC and AC electricity in its first half and provides the foundation for the basics of power generation, distribution and conversion. Replaces Electricity and AC/DC Machinery.

### EET\* K145 (formerly EET K2105) 1 CREDIT HOUR FUNDAMENTALS ELECTRICAL CIRCUITS AND MACHINES LAB

Prerequisite: MAT\* K186. Corequisite: EET\* K144. Students will conduct laboratory experiments in electrical power, from basic principles through operation of AC and DC machinery; it is for students in Nuclear Engineering Technology and other nonelectrical programs. Replaces Electricity and AC/DC Machinery Lab.

### EET\* K162 (formerly EET K1116) 3 CREDIT HOURS ELECTRONIC APPLICATIONS

Prerequisite: MAT\* K095 or MAT\* K095I. Corequisites: MAT\* K137 or MAT\* K137S and EET\* K163.

This course is a degree level study of Basic Electronics. It is designed for students who are NOT in the Electrical Engineering Technology degree program or for students who need to upgrade their skills before enrolling in the EET program. Recommended for Computer Science Technology students.

### EET\* K163 (formerly EET K1117) 1 CREDIT HOUR

ELECTRONIC APPLICATIONS LAB

Prerequisite: MAT\* K095 or MAT\* K095I. Corequisites: MAT\* K137 or MAT\* K137S and EET\* K162.

This course is the lab component to Electronic Applications. It is designed for students who are NOT in the Electrical Engineering Technology degree program or for students who need to upgrade their skills before enrolling in the EET program. Recommended for Computer Science Technology students.

### EET\* K234 (formerly EET K2100) 3 CREDIT HOURS ELECTRONICS II

Prerequisites: EET\* K134/135. Corequisite: EET\* K235.

In this course, the design, analysis and synthesis of semi-conductor circuits for various applications are presented. Bipolar and field effect transistors as well as integrated circuits are considered. High and low frequency effects are investigated. Various circuits and circuit functions will be addressed, including multistage and feedback amplifiers, operational amplifiers, power amplifiers, regulated power supplies, silicon controlled rectifiers, and oscillators.

### EET\* K235 (formerly EET K2101) 1.5 CREDIT HOURS

### ELECTRONICS II LAB

Prerequisites: EET\* K134/135. Corequisite: EET\* K234. This course supports Electronics II by providing the student with practical experience in designing, building, and evaluating the operation of a variety of electronic circuits. Both computer simulation and bench experimentation are employed in gaining familiarization with circuit design, function, and operation.

### EET\* K254 (formerly EET K2110) 3 CREDIT HOURS DIGITAL ELECTRONICS I

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K1375.

Corequisite: EET\* K255.

Students will engage in a comprehensive study of binary logic gates. The circuits for certain TTL, ECL, MOS, and CMOS gates are analyzed. The course also includes the study of codes, encoding, decoding, number systems, and various sequential logic circuits such as flip-flops, counters, and shift registers.

### EET\* K255 (formerly EET K2111) 1.5 CREDIT HOURS DIGITAL ELECTRONICS I LAB

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S.

*Corequisite: EET\* K254.* Students will engage in a comprehensive study of binary logic gates. The circuits for certain TTL, ECL, MOS, and CMOS gates are analyzed. The course also includes the study of codes, encoding, decoding, number systems, and various sequential logic circuits such as flip-flops, counters, and shift registers.

#### EET\* K258 (formerly EET K2120) 3 CREDIT HOURS MICROPROCESSORS & CONTROLS

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S. Corequisite: EET\* K259. Students will be introduced to the concepts involved in a single board microcomputer. Emphasis is placed upon using a microprocessor as a control device, and also in a microcomputer system. Various microprocessors and related integrated circuits are studied.

### EET\* K259 (formerly EET K2121) 1.5 CREDIT HOURS

MICROPROCESSORS & CONTROLS LAB Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S. Corequisite: EET\* K258. This lab provides application of the concepts corresponding to the theory in EET\* K258. EET\* K264 (formerly EET K2130) 3 CREDIT HOURS

### DATA ACQUISITION AND CONTROLS

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S. Corequisite: EET\* K265.

This course provides an introduction to data acquisition circuits and systems as well as basic feedback control systems. Topics include measurements techniques, computerized data acquisitions, introduction to Labview, Interfacing, signal processing and communications, frequency and transient response, feedback control techniques, mechanical systems and mechanical power transmission. Students will learn the basics of measurements and data acquisition using Labview based exercises. Offered Fall Semesters.

# EET\* K265 (formerly EET K2131) 1 CREDIT HOURS

DATA ACQUISITION AND CONTROLS LAB Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S.

Corequisite: EET\* K264.

This lab provides students with hands-on experience with analog and digital closed loop automatic control components, circuits, and systems. It familiarizes students with analog and digital simulation techniques.

### EET\* K266 (formerly EET K2138) 3 CREDIT HOURS

**ADVANCED CONTROLS AND ROBOTICS** *Prerequisites: EET\* K264/265.* 

*Corequisite: EET\* K267.* This course familiarizes students with the sensors, programmable controllers, and actuators that make up modern day robots. Automatic control system techniques are used to implement robot analysis and design. This course is equivalent to MFG\* K221 Mechatronics.

### EET\* K267 (formerly EET K2139) 1 CREDIT HOUR ADVANCED CONTROLS AND ROBOTICS LAB

Prerequisites: EET\* K264/265. Corequisite: EET\* K266. This lab provides students with hands-on experience with the sensors, programmable controllers, and actuators used in robotics. A microcomputer controlled system design project is included.

# EET\* K274 (formerly EET K2140) 3 CREDIT HOURS

**ELECTRONIC COMMUNICATION SYSTEMS** *Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K1375.* 

Corequisite: EET\* K275.

Students will study communications from an informational and circuit/systems point of view. Modulation theory and techniques will be covered. Noise considerations, bandwidth requirements, and







the transmission, propagation, reception and detection of RF signals will be considered. Analog and digital considerations will be addressed.

### EET\* K275 (formerly EET K2141) 1.5 CREDIT HOURS ELECTRONIC COMMUNICATION SYSTEMS LAB

Prerequisites: EET\* K105/106 and MAT\* K137 or MAT\* K137S.

### Corequisite: EET\* K274.

This course supports Communications I by providing students with hands-on experience in the design, check-out, and evaluation of the various circuits and subsystems that comprise a communications system. Both computer simulation and bench experimentation are emphasized in gaining a familiarization with the circuitry and instrumentation involved.

# EET\* K295 (formerly EET K2995) 3 CREDIT HOURS

### **ELECTRICAL CO-OP**

Prerequisite: Permission of the program coordinator.

Corequisites: Student must have completed all freshman level technology courses and have a GPA of 2.50 or better. Students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by each co-op student during the semester internship.

# ENGINEERING

### EGR\* K111 3 CREDIT HOURS INTRODUCTION TO ENGINEERING

Prerequisite: MAT\* K137. Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include: sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, robotics, manufacturing technologies, and fundamentals of engineering economics.

### EGR\* K211 (formerly ENGR K211) 3 CREDIT HOURS ENGINEERING STATICS

Prerequisite: MAT\* K254. Corequisite: MAT\* K254. Students will be introduced to engineering mechanics via vector approach to static forces and their resolution. Topics include: properties of force systems, freebody analysis, first and second moments of areas and mass and static friction. Applications to trusses, frames, beams and cables are included.

### EGR\* K212 (formerly ENGR K212) 3 CREDIT HOURS ENGINEERING DYNAMICS

Prerequisites: EGR\* K211 and MAT\* K256. Engineering applications of Newtonian mechanics to dynamic forces, translational motion, work, impulse and momentum will be taught. Topics include: kinematics, kinetics of particles and rigid bodies, vibrations, energy and momentum conservation.

# **ENGLISH**

# ENG\* K096 6 CREDIT HOURS INTRODUCTION TO COLLEGE ENGLISH

Prerequisites: ESL\* K063 with a "C#" grade or better; or appropriate placement∞ through multiple measures assessment process. This course prepares students for the reading and writing demands in Composition and other college level courses by integrating reading, writing and critical thinking. Student writing will focus on understand reporting on, reacting to and analyzing the ideas of others. Texts will serve as models and sources for students to refine their skills in exposition, interpretation, and argumentation. Students learn and practice specific college-level skills through critical reading and writing, class discussions, lectures, group presentations or workshops. This course does not satisfy an English requirement or an elective in any degree program, nor do its credits count toward graduation.

### ENG\* K101S 6 CREDIT HOURS COMPOSITION EMBEDDED SUPPORT

Prerequisite: ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.

ENG\* K101S is a Composition course with embedded support for students in need of additional reading and writing practice. It engages students in critical observation, reading, and writing. The course prepares the student for the exposition, analysis, and argument required in college writing, and for meeting the conventions of college English. Writing assignments require that students develop their own points of view and demonstrate understanding of complex ideas and issues. Methods for research, including use of the library, appropriate documentation, and incorporation of sources in original papers will be taught through assigned writings. Recommended placement∞ in ENG\* K101S may be based on multiple criteria including standardized test scores, entrance essays, high school transcripts or instructor/advisor suggestion. Students may also self-place into ENG\* K101S. A grade of "C" or higher must be achieved to successfully complete ENG\* K101S.

### ENG\* K101 (formerly ENG K111) 3 CREDIT HOURS COMPOSITION

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. College Composition engages students in critical observation, reading, and writing. The course prepares the student for the exposition, analysis, and argument required in college writing, and for meeting the conventions of college English. Writing assignments require that students develop their own points of view and demonstrate understanding of complex ideas and issues. Methods for research, including use of the library, appropriate documentation, and incorporation of sources in original papers will be taught through assigned writings.

### ENG\* K102 (formerly ENG K112) 3 CREDIT HOURS LITERATURE & COMPOSITION

Prerequisite: ENG\* K101 or ENG\* K101S or permission of the instructor. Students learn how to read serious literature, how to develop an interpretation, and how to explain and support their ideas in writing. Through the study of selected works of fiction, poetry, and drama, students learn the elements of textual analysis and become familiar with the ways in which other critical approaches affect interpretation. In addition to continued instruction in composition, students are required to read and write frequently.

### ENG\* K200 (formerly ENG K226) 3 CREDIT HOURS ADVANCED COMPOSITION

Prerequisites: ENG\* K101 or ENG\* K101S with a "C" grade or better; or permission of the instructor.

This course is designed to further develop and refine expository writing skills for both academic and popular audiences. Assignments will stress interpretation, argumentation and critical thinking, with an emphasis on clarity, style and organization.

### ENG\* K202 (formerly ENG K225) 3 CREDIT HOURS

### **TECHNICAL WRITING**

Prerequisite: ENG\* K101 or ENG\* K1015. This course is designed for students who want to develop writing skills needed in the workplace. After targeting an audience, students will complete an array of assignments: memos, instructions, proposals, formal analytical reports, etc. Topics for these assignments will relate to the student's major. Students will learn how to format pages, incorporate visuals into their writing, and give brief oral reports based on their written assignments. Students should have familiarity with word processing before enrolling in the course.

### ENG\* K208 3 CREDIT HOURS INTRODUCTION TO ENGLISH AS LANGUAGE

Prerequisite: ENG\* K101 or ENG\* K101S with a "C" grade or better.

This course challenges assumptions students may have about language by examining the diversity and changes of the English language. Topics include the nature of language, a brief history of the English language, ethnic and regional varieties of English, grammar issues, the mass media's use of language, and social aspects of language.

## ENG\* K210 (Formerly ENG K222) 3 CREDIT

### HOURS FICTION

*Prerequisite: ENG\* K102 or permission of the instructor.* 

This course surveys the elements, structure, technique and evolution of the novel in the Western literary tradition. Writing assignments will stress critical analysis including the incorporation of various critical approaches.

### ENG\* K211 (formerly ENG K209) 3 CREDIT HOURS SHORT STORY

Prerequisite: ENG\* K102 or permission of the instructor.

This course explores the unique elements of the short story form, its historical and artistic development, and the stories of outstanding writers. Writing assignments will stress critical analysis including the incorporation of various critical approaches.

#### ENG\* K213 (formerly ENG K210) 3 CREDIT HOURS POETRY

*Prerequisite: ENG\* K102 or permission of the instructor.* 

This course explores the elements of poetry from traditional forms to contemporary ones. Readings will be selected

from the ancients to the moderns, from different cultures, and from different historical and literary periods. Writing assignments will stress critical analysis including the incorporation of various critical approaches.

#### ENG\* K222 (formerly ENG K214) 3 CREDIT HOURS AMERICAN LITERATURE II

Prerequisite: ENG\* K102 or permission of the instructor.

This course is a survey of American writers beginning from approximately 1865 to the present. Students will read the fiction, poetry, and drama of selected writers, and examine the dominant themes and literary movements that have shaped American literature. The multicultural dimensions of American literature will be explored, and a variety of relevant critical strategies will be used. Writing assignments will stress critical analysis including the incorporation of various critical approaches.

### ENG\* K232 (formerly ENG K216) 3 CREDIT HOURS BRITISH LITERATURE II

Prerequisite: ENG\* K102 or permission of the instructor.

This course is a chronological survey of British Literature from 1790 through the twentieth century. Through reading selected works of the Romantic, Victorian, Modern and post-Modern periods, emphasis will be placed upon the unfolding British literary tradition and its intellectual background. Themes include British patriarchy, women's rights and the emergence of feminism, imperialism and nationalism, and the crisis of traditional belief systems, including religious, social, and political institutions. Writing assignments will stress critical analysis, including the incorporation of various critical approaches.

### ENG\* K240 (formerly ENG K243) 3 CREDIT HOURS

### STUDIES IN WORLD LITERATURE

Prerequisite: ENG\* K102 or permission of the instructor.

This course is intended to further develop the critical skills and knowledge students acquired in ENG K102 by exploring recurring themes and various cultural perspectives. The emphasis is on works not covered in American and British literature courses, and particular topic selections will examine the impact of culture and history on the literary imagination. Writing assignments will stress critical analysis including the incorporation of various critical approaches. Course fulfills International/Intercultural Requirement.

### ENG\* K250 (formerly ENG K241) 3 CREDIT HOURS STUDIES IN ETHNIC LITERATURE

Prerequisite: ENG\* K102 or permission of the instructor.

This course explores social issues such as cultural identity and assimilation as they are presented in literature written by authors from different ethnic groups. Particular attention will be paid to international influences in the production of "ethnic" literature. A study of critical strategies necessary for recognizing the unique elements of ethnic literature will also be provided. Writing assignments will stress critical analysis, including the incorporation of various critical approaches. Course fulfills International intercultural Requirement.

#### ENG\* K261 (formerly ENG K276) 3 CREDIT HOURS WOMEN WRITERS ACROSS CULTURES

Prerequisite: ENG\* K102 or permission of the instructor.

This course is intended to broaden students' knowledge of literary traditions and themes from a non-western and multicultural approach through the lens of women's writing. Students will read numerous works by women and will explore the use of critical strategies in relation to those works. Writing assignments will stress critical analysis, including the incorporation of various critical strategies. Emphasis will be on the influence of geography, history, and social environments in shaping women's writing. Course fulfills International/Intercultural Requirement.

#### ENG\* K281 (formerly ENG K227) 3 CREDIT HOURS CREATIVE WRITING

Prerequisite: ENG\* K102.

Creative Writing is an advanced writing course. Students will read, study, and analyze the literary techniques and craft of great prose and poetry writers. In structured exercises, they will practice strategies for creating character, plot, dialogue, symbolic and figurative imagery, as well as other key narrative and poetic elements. Students will also create their own prose and poetry projects.

### ENG\* K284 3 CREDIT HOURS ADVANCED CREATIVE WRITING

*Prerequisite: ENG\* K281 or permission of the instructor.* 

Advanced Creative writing is for students who have a well-established understanding of literary form and the fundamental elements of writing prose and poetry.





This course is designed to help students develop and expand their writing portfolios. Students are required to write in both prose and poetry, and they will participate in cooperative writing workshops.

#### ENG\* K296 (formerly ENG K298) 3 CREDIT HOURS WORK EXPERIENCE IN ENGLISH

This course allows students to apply their knowledge of English in a practical setting, such as tutoring or publications. The number of credits, course requirements, and means of evaluation are specified in a contract between the instructor and the student.

# ENVIRONMENTAL ENGINEERING TECHNOLOGY

# ENV\* K101 (formerly ENV K1100) 3 CREDIT HOURS

# ENVIRONMENTAL STUDIES

Corequisite: ENG\* K096 or higher. Please note: if completing ENG\* K096 prior to enrolling in ENV\* K101, a grade of "C#" or better is required for registration into this course.

This is a course that describes the study of the biological and physical aspects of the environment and environment-related issues, including procedures for lessening or controlling environmental pollution and related damage. Some field work will be included. This course is equivalent to BIO\* K180 Environmental Science. Course fulfills International/Intercultural requirement.

#### ENV\* K110 (formerly ENV K1210) 3 CREDIT HOURS ENVIRONMENTAL REGULATIONS

Prerequisite: ENV\* K101.

This course provides a broad view of federal, state, and municipal environmental regulations as they apply to industry, commercial establishments, local governmental facilities, and the individual citizen. It provides a practical approach to regulatory understanding to enable one to plan an effective and economically sound compliance program. Course topics include the Clean Air Act (CAA), Clean Water Act (CWA), Toxic Substance Control Act (TSCA), SARA Title III (Community Right-to-Know), and federal, state, and local regulations, covering such topics as hazardous material transportation, inground tank storage, and specific hazardous materials such as asbestos and PCBs.

ENV\* K130 (formerly ENV K1225) 3 CREDIT HOURS

### **OCCUPATIONAL SAFETY & HEALTH**

This course is an introduction to Occupational Safety & Health in the workplace. It will introduce students to the safety and health field and address the application of engineering, management principles, and techniques to safety, health, and loss control. The topics include general safety, health, and risk assessment concepts and terms. Discussions will include historical developments, program management, problem identification, engineering assessment, hazard recognition, evaluation, and control. The course work will also introduce the student to measurement and evaluation systems, legal and regulatory requirements, environmental health and safety, industrial hygiene, safety engineering, product safety and public health, risk assessment analysis and management, accident investigation, ergonomics, and ethics and professionalism. A visit to an industrial site will be included.

### ENV\* K146 3 CREDIT HOURS INTRODUCTION TO GIS

Students will learn the basic principles of Geographic Information Systems and explore and evaluate the various data models and structures used in the input management, analysis and output of geographic data. Students will develop hands-on experience through use of a microcomputer based vector system (ArcView GIS), and examine how the nature and character of spatial data can be used in studies of natural and socio-economic environments. This course is equivalent to CIV\* K146 or GIS\* K146.

### ENV\* K172 1 CREDIT HOUR ENVIRONMENTAL RESEARCH PROJECT I

Prerequisite: Permission of the instructor. This course introduces and develops skills in microscopy techniques, field research, literature searches, monitoring equipment usage, and teamwork, and provides hands-on experience in the field and laboratory.

### ENV\* K207 3 CREDIT HOURS SUSTAINABLE LANDSCAPE ECOLOGY

Prerequisite: BIO\* K180 or ENV\* K101. This course will cover the basic concepts, principles, and methods of landscape ecology, as well as its important applications in nature conservation, resource management, and landscape planning and design. Through reading and discussion students will explore the ecological relationships of biotic communities in heterogeneous environments and the impor-

tance of the landscape scale to ecosystem diversity and function in wetlands, forests and rangelands. Students will learn about the relationships of landscape ecology to plant ecology, animal ecology, population ecology, aquatic ecology, landscape architecture and geography. Students will specifically address sustainability, BMPs and conservation issues at the landscape scale. Students will perform field work and site visits. Students will examine the aspects of soil ecology relevant to environmental studies, especially focusing on sustainability and conservation of soils, soils as functional components of agricultural ecosystems and on the role of soils in the global biochemical cycling of organic carbon. The student will be introduced to fundamental concepts of soil science, soil organisms and ecosystem ecology of soils, and will apply their understanding of soil ecology to current environmental problems including coil stewardship and sustainability.

# ENV\* K208 (formerly ENV K2320) 3 CREDIT HOURS

### LONG ISLAND SOUND ECOLOGY

*Prerequisite: ENV\* K101 or permission of the instructor.* 

This course is an ecological study of Long Island Sound marine environments. Emphasis is placed on the factors limiting the distribution of marine organisms and on the visual recognition of invertebrates, fish, and seaweeds. Extensive travel to off campus field study locations is featured. Pollution run-off to the Long Island Sound and urban areas will be discussed.

### ENV\* K220 (formerly ENV K2210) 3 CREDIT HOURS HAZARDOUS MATERIALS

Prerequisite: None required; CHE\* K111 or CHE\* K121 recommended.

This course is a study of accident prevention, safety, industrial hygiene and proper procedures for handling hazardous materials. Properties of many industrial reagents and solvents are examined so they can be handled and stored properly. The following specific topics will be covered: Material Safety Data Sheets (MSDS), labeling, personnel training and records, emergency response program, toxicity routes of entry, storage, ventilation, personal protective equipment, barriers, and spills containment Requirements of OSHA, SPCC, RCRA, and TSCA will be reviewed to provide students with a working knowledge of the regulations. This course meets the requirements of 29 CFR 1910.120.

ENV\* K230 (formerly ENV K2101) 3 CREDIT HOURS

### ENVIRONMENTAL CONTROL PROCESSES

Prerequisites: CHE\* K111 or CHE\* K121; ENV\* K101; MAT\* K172 or higher. This course gives an introduction to the concepts and quantitative techniques of environmental engineering. The topics are presented as the basis for the operations and processes used to control air and water pollution, to treat supplied water, to remediate contaminated sites, and to dispose of or otherwise handle solid wastes. Course contents include mass balance, chemical equilibria, exponential growth and decay, surface and groundwater flow and transport, unit operations, and chemical and biological treatment processes, as well as discussions of risk assessment and application of environmental policies.

#### ENV\* K238 (formerly ENV K2200) 3 CREDIT HOURS AIR OUALITY

Prerequisites: MAT\* K172; CHE\* K111 or CHE\* K121.

This course gives a comprehensive overview of outdoor and indoor air pollution problems as well as noise pollution. Topics include types and sources of pollutants and their effects on the atmosphere, human health, and vegetation. Regulation, surveillance, and control methods will be discussed.

### ENV\* K242 (formerly ENV K2110) 3 CREDIT HOURS HYDROLOGY

Prerequisite: MAT\* K172 or higher. This course features an emphasis on ground water. Topics include weather as it affects water resources, precipitation, stream flow, stream flow hydro graphics, rainfall run-off relationships, the impact of natural and man-made phenomena on water resources, and ground water hydrology.

#### ENV\* K245 (formerly ENV K2230) 3 CREDIT HOURS WATER RESOURCES ENGINEERING

Corequisite: ENV\* K245L.

This course studies the methodology used in determining storm water runoff for small urban areas. The theory and logic of both the Rationale Method and the Soil Conservation Services TR-55 are studied in detail. The quantity computations are covered, as well as the understanding of gutter analysis. As part of the lab, the student will design a storm drain system, including a cost estimate for the project. This course is equivalent to CIV\* K236.

### ENV\* K245L (formerly ENV K2231) 1 CREDIT HOUR

### **WATER RESOURCES ENGINEERING LAB** *Corequisite: ENV\* K245.*

This course gives the methodology used in determining storm water runoff for small urban areas. This lab is used as a practical exercise to develop the methods of Water Resources Engineering, including actual design of a storm water system with a cost estimate. This course is equivalent to CIV\* K237.

### ENV\* K254 (formerly ENV K2330) 3 CREDIT HOURS NUCLEAR ENVIRONMENTAL IMPACT

Prerequisites: CHE\* K111 or CHE\* K121; MAT\* K186, ENV\* K101, PHY\* K115. This course introduces the effects of ionizing radiation on humans and ways to measure radiation in the environment. Topics include sources and properties of radiation environmental pathways, nuclear fuel cycle, high and low radioactive wastes, and nuclear power plants. Emphasis will be on the impact of waste on the environment.

### ENV\* K265 3 CREDIT HOURS FUNDAMENTAL MEASUREMENTS AND APPLICATIONS LAB

Corequisites: MAT\* K172. Recommended High School Chemistry or CHE\* K111. This course will familiarize students with environmental analysis, instrumentation, and sampling methods. Students will have hands-on training and experience with various sampling analysis equipment and techniques. Upon completion the participants will understand the basic concepts necessary to choose and conduct environmental measurements in streams, lakes, and wetlands and for stormwater runoff, wastewater, gasses and soils. The student will also be able to utilize computer applications to perform data analysis for all laboratory and field work methods completed.

# ENV\* K275 (formerly ENV K2300) 3 CREDIT HOURS

**ENVIRONMENTAL CONTROL PROJECT** *Prerequisites: CHE\* K111 or CHE\* K121;* 

MAT\* K172, ENV\* K101, ENV\* K230. Corequisite: CHE\* K111 or CHE\* K121. This course is designed to provide students with experience in designing an industrial environmental management system. Knowledge and application of regulations, sampling methods, waste minimization, hazardous materials, wastewater treatment, and pollution control techniques are required for successful completion of the project. ENV\* K277 1 CREDIT HOUR

## **ENVIRONMENTAL RESEARCH PROJECT II**

*Prerequisite: ENV\* K172.* This course further enhances the skills learned in ENV\* K172. The course will include field work and flexible hours.

### ENV\* K278 1 CREDIT HOUR ENVIRONMENTAL RESEARCH PROJECT III

Prerequisite: ENV\* K277. This course further enhances the skills learned in ENV\* K277. The course will include field work and flexible hours. Advanced students will mentor less advanced students in this course.

### ENV\* K279 1 CREDIT HOUR ENVIRONMENTAL RESEARCH PROJECT IV

Prerequisite: ENV\* K278.

This course further enhances the skills learned in ENV\* K278. The course will include field work and flexible hours. Advanced students will mentor less advanced students in this course.

### ENV\* K280 3 CREDIT HOURS ENVIRONMENTAL SURVEYING Prerequisite: MAT\* K172.

Environmental Surveying introduces students to the concepts, technologies and techniques that allow us to collect, manage, analyze and represent spatial information for a wide variety of applications. The course will cover basic concepts, definitions, and functions associated with Land Surveying. We will examine how surveying can be applied in different fields including urban planning, wetland delineation, environmental and natural resource management, site remediation, and land-use. We will also consider larger societal issues in this course, including how the increasing use of surveying, global positioning systems (GPS), and geographical information systems (GIS) technologies in public agencies, business and non-profit organizations has enabled business, government and the public to make more informed land-use decisions. This course is cross listed with CIV\* K250.

### ENV\* K291 (formerly ENV K2995) 3 CREDIT HOURS ENVIRONMENTAL ENGINEERING TECHNOLOGY CO-OP

Prerequisite: Permission of the program coordinator. Corequisite: Students must have completed all freshman level technology courses and have a GPA of 2.50 or better. Students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory



college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester internship.

### ENV\* K295 (formerly ENV K2310) 3 CREDIT HOURS ENVIRONMENTAL ISSUES SEMINAR

Corequisite: Recommended ENV\* K101 or BIO\* K180 or by permission of instructor. This seminar consists of assigned readings and guest lecturers on various environmental topics that are important to the development of Environmental and Civil Engineering Technology students, but also valuable for anyone who wants to learn, understand, and write effectively about the environment. Some common seminar topics may include federal and state regulations, solid and municipal waste management, best management practices (BMPs), environmental restoration and remediation, alternative and renewable energy, sustainable landscape management, sustainable agriculture, stewardship, land use, water quality, stormwater management and global and local environmental quality trends. Students are required to discuss, think about, and write about the topics, carrying out their own library research, to support positions that they will develop. This course is equivalent to BIO\* K289.

# ENGLISH AS A SECOND LANGUAGE

### ESL\* K060 (formerly ENG K060) 4 CREDIT HOURS WRITING WITH ORAL PRACTICE AND GRAMMER I

In this intensive course, students will work extensively on the sentence level of beginner/high beginner grammatical structure through speaking, listening, and writing exercises and language learning games. They will also generate personal writing through narration, description and opinion. Students will be introduces to the writing process and oral reading strategies.

### ESL\* K061 3 CREDIT HOURS WRITING WITH ORAL PRACTICE AND GRAMMER II

*Prerequisite: ESL\* K060 with a "C#" grade or better.* 

In this course, a continuation of ESL\* K060, students will practice sentence level and paragraph skills of low-intermediate/ intermediate grammatical structures through speaking, listening, and writing exercises and language learning games. They will develop composition skills by learning to organize information in a variety of different ways including by order of importance and compare and contrast. Students will also study vocabulary online and keep a vocabulary journal. Oral reading strategies will be emphasized.

### ESL\* K062 (formerly ENG K086) 3 CREDIT HOURS SENTENCE STRUCTURE

This course is a basic writing course, intended for the ESOL population, which will cover the mechanics of writing a well-structured sentence. Subject/verb agreement, subject/verb/object format, adjectival and prepositional phrases and vocabulary building will be the major skills covered in this course. A portion of the class time will be geared toward the A∞ Learning computer software program.

### ESL\* K063 4 CREDIT HOURS WRITING WITH ORAL PRACTICE AND GRAMMER III

Prerequisite: ESL\* K061 with a "C#" or better. In the final course of this series, students will complete their study of intermediate grammatical structures. Writing assignments will shift from one paragraph to the essay as students learn to incorporate facts, examples, reason, and more into their paragraphs. Students will study vocabulary on-line and keep a vocabulary journal. Reading strategies such as annotating, summarizing, and paraphrasing will also be introduced.

# FRENCH

### FRE\* K111 (formerly FRE K101) 4 CREDIT HOURS ELEMENTARY FRENCH I

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a grade of "C#" or better. This course introduces the basic principles of the French language and provides a cultural understanding of the Franco phonic world. The emphasis of the course is on developing and applying the basic skills of language learning: listening, speaking, writing, and reading through classroom activities. Language laboratory is available.

FRE\* K112 (formerly FRE K102) 4 CREDIT HOURS

### **ELEMENTARY FRENCH II**

Prerequisite: FRE\* K111.

This course is a continuation of Elementary French I. More advanced grammatical structures are introduced to help students continue to develop the skills of language learning, and to prepare them to begin expressing more complex thoughts in French. Cultural notes and literary readings will be included to offer a wide range of historical, social, political and artistic information to increase the knowledge and understanding of the French speaking world. Language laboratory is available.

# FIRE TECHNOLOGY & ADMINISTRATION

### FTA\* K112 (formerly FTA K1102) 3 CREDIT HOURS

**INTRODUCTION TO FIRE TECHNOLOGY** Corequisite: ENG\* K096 or permission of the program coordinator based on FTA work experience.

Please note: if completing ENG\* K096 prior to enrolling in FTA\* K112, a grade of "C#" or better is required for registration into this course.

This course covers the nature and extent of the fire problems in the United States with a focus on the organizational structure that addresses the fire control and prevention problems; the basic characteristics and behavior of fires; hazardous properties of materials; extinguishing agents; fire protection equipment, and fire-test methods.

### FTA\* K116 (formerly FTA K1106) 3 CREDIT HOURS BUILDING CONSTRUCTION

Prerequisite: FTA\* K112 or permission of the program coordinator based on FTA work experience.

This course covers the major types of building construction and their related problems under fire conditions. Fire resistance and flame spread ratings, fire walls and partitions, protection of openings, and fire test methods are major instructional subjects.

# FTA\* K118 (formerly FTA K1108) 3 CREDIT HOURS

**FIRE PREVENTION AND INSPECTION** *Prerequisite: FTA\* K112 or permission of the program coordinator based on FTA work experience.* 

This course identifies the history and philosophy of fire prevention. Organizing for fire prevention and inspection, training inspectors, methods of inspection, reports and record keeping, fire prevention education, public relations in inspection work, coordination with government agencies, and code administration are key instructional subjects.

### FTA\* K125 3 CREDIT HOURS CHEMISTRY FOR EMERGENCY RESPONDERS

Prerequisites: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better; FTA\* K112, or permission of the program coordinator based on FTA work experience. MAT\* K095 or MAT\* K095I or high school algebra recommended.

This course is designed to prepare the responder to function safely at the scene of a hazardous materials incident by understanding the potential hazards. This is accomplished by gaining recognition of chemical nomenclature and basic principles of chemistry in order to assess risks to responders and the public. The course seeks to convey to first responders or prevention personnel a sound understanding of the basic chemistry of hazardous materials to permit them to correctly assess the threat posed by hazardous materials incidents that may occur accidentally or intentionally. Problem-solving sessions and interactive discussion cover topics such as salts and inorganic nonsalts, hydrocarbons, hydrocarbon derivatives, and hydrocarbon radicals. Applying the science of chemistry to thermodynamics, volatility, and combustion provides realworld opportunities.

#### FTA\* K210 (formerly FTA K2100) 3 CREDIT HOURS WATER SUPPLY AND HYDRAULICS

Prerequisites: MAT\* K172; PHY\* K114; or permission of the program coordinator based on FTA work experience.

This course covers the basic properties of incompressible fluids, static and velocity pressures, and flow through orifices. Bernoulli's Theorem, Venturi principle, flow of water in pipes, Reynolds number, Hazen-Williams formula, head calculations, water distribution systems, and pumping problems constitute key subject areas.

#### FTA\* K213 (formerly FTA K2103) 3 CREDIT HOURS CODES AND STANDARDS

Topics covered in this course covered are fire and building codes as a means for providing reasonable public safety; the code development and adoption process; code administration; major code producing organizations; national standards with particular concentration on the Life Safety Code of the NFPA and its referenced standards. Three class hours weekly.

### FTA\* K216 (formerly FTA K2106) 3 CREDIT HOURS

### **MUNICIPAL FIRE ADMINISTRATION**

Prerequisite: FTA\* K112 or permission of the program coordinator based on FTA work experience.

This course focuses on the organization of municipal fire prevention and control services, needs analysis, master planning, organizational structuring, distribution of company's personnel requirements, hiring practices, training, record keeping, work scheduling, staff development, labor problems, physical equipment and facilities, and budget preparations.

### FTA\* K218 (formerly FTA K2108) 3 CREDIT HOURS SPRINKLERS & FIXED EXTINGUISHING SYSTEMS

Prerequisite: FTA\* K210 or permission of the program coordinator based on FTA work experience.

This course focuses on wet and dry-pipe automatic sprinklers, both commercial and residential. Preaction and deluge systems, water spray and foam systems, standpipes, carbon dioxide dry chemical and halon fire extinguishing and explosion suppression systems are detailed. The use of appropriate NFPA standards is implemented.

### FTA\* K219 (formerly FTA K2109) 3 CREDIT HOURS FIRE INVESTIGATION

Prerequisites: CHE\* K111 or CHE\* K121; FTA\* K116; PHY\* K115; or permission of the program coordinator based on FTA work experience.

This course examines the determination of points of origin and causes of fire. Discriminating between fires of accidental and incendiary origin, managing operations at the fire scene, collecting and preserving evidence, recording information, and the use of scientific aids to investigation are course considerations.

### FTA\* K225 (formerly FTA K2105) 3 CREDIT HOURS FIRE ALARM AND COMMUNICATION SYSTEMS

This course acquaints fire-related personnel with various alarm systems and departmental procedures in working with the systems and also familiarizes students with NFPA standards relating to fire alarm systems.

### FTA\* K240 (formerly FTA K2123) 3 CREDIT HOURS

**INDUSTRIAL HAZARDS & PROCEDURES** *Prerequisite: CHE\* K111 or CHE\* K121 or permission of the program coordinator based on FTA work experience.* This course studies various industries, such as metal working, plastics fabrication, printing, textile manufacturing, and pharmaceutical manufacturing. An understanding of the various industrial processes utilized and their attendant fire and explosion hazards is afforded with the identification of applicable safety standards and measures to reduce potential problems.

### FTA\* K290 (formerly FTA K2995) 3 CREDIT HOURS FTA COOPERATIVE WORK

Prerequisite: Permission of the program coordinator.

Corequisite: Student must have completed all freshman level technology courses and have a GPA of 2.50 or better.

Student will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester internship.

# **GEOGRAPHY**

### GEO\* K111 3 CREDIT HOURS WORLD REGIONAL GEOGRAPHY

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course provides students with a survey of the lands, peoples, and places in the world's major cultural regions. Students explore the interaction between the physical environment and cultural, political, and economic conditions in the world's regions. Course fulfills International/Intercultural Requirement.

# GEOGRAPHIC INFORMATION SYSTEMS

GIS\* K146 3 CREDIT HOURS INTRODUC TION TO GIS

Students will learn the basic principles of Geographic Information Systems and explore and evaluate the various data models and structures used in the input management, analysis and output of geographic data. Students will develop hands-on experience through use of a microcomputer based vector system (ArcView GIS), and examine how the nature and character of spatial data can be used in studies of natural and socio-economic environments. This course is equivalent to CIV\* K146 or ENV\* K146.

# **GEOLOGY**

# GLG\* K110 (formerly GEO K121) **1 CREDIT HOUR**

### **CONNECTICUT FIELD GEOLOGY** Prerequisite: EAS\* K110.

Corequisite: EAS\* K110 and ENG\* K096 In this short term course students will explore, hike, and prospect for geologic evidence throughout Connecticut in order to understand the state's rich volcanic and glacial history. Students will collect many rock samples and prepare their own field guide after visits to impressive natural sites. This course offers experiential learning through extensive geology expeditions. EAS\* K110 may be taken as a prerequisite or corequisite to this course.

### GLG\* K112 (formerly GEO K125) **3 CREDIT HOURS GEOLOGY OF CONNECTICUT**

Prerequisite: EAS\* K110. Corequisite: EAS\* K110 and ENG\* K096.

Please note: if completing ENG\* K096 prior to enrolling in EAS\* K110, a grade of "C#" or better is required for registration into this course.

In this course, students will explore, hike and prospect for geologic evidence throughout Connecticut in order to understand the state's rich volcanic and glacial history. Students will collect many rock samples and prepare their own field guide after visits to impressive natural sites. This course offers experiential learning through extensive geology expeditions. EAS\* K110 may be taken as a prerequisite or corequisite to this course.

# **GRAPHIC DESIGN**

### GRA\* K131 (formerly PHOT K102) **3 CREDIT HOURS DIGITAL PHOTOGRAPHY**

This course is an introduction to digital photography and iPhoto and basic photoediting features of Adobe Photoshop. Students shoot digital images for specific assignments emphasizing exposure, depth-of-field, composition, and image quality. The introduction of digital camera techniques, handling, and creative approaches will be the focus. Students will read and report on famous photographers and photography literature. The minimum camera requirement is an advanced digital camera in which you can manually control the f-stop, focus, ISO, and exposure length.

tion basics including scanning software. Students study page design, typography, and image editing. Emphasis will be on the use of the computer for writing, editing, imaging and publication design. Students will read and report on graphic design topics.

PUBLICATION DESIGN

processing program.

Prerequisite: ENG\* K101 or ENG\* K101S

placement∞ or completion of ENG\* K096

with a "C#" grade or better; or permission

of the instructor and knowledge of a word

applications used in the field of Graphic

Design: Photoshop, Illustrator, InDesign

and Acrobat Pro. Students also learn file

managements and computer naviga-

This course provides an overview of

### GRA\* K155 (formerly ENG K130) **3 CREDIT HOURS ADVERTISING DESIGN**

Prerequisite: Knowledge of a word processing program.

This computer graphics course focuses on using Adobe Photoshop to design various advertisements and prepare them for print and the web. Students will apply design principles, and type/image integration to complete design projects of moderate to increasing complexity. Emphasis is placed on project development and execution, the generation of ideas, concepts and teamwork in order to communicate persuasively and effectively. Student-designed computer lab projects include writing copy, brand positioning, client/agency relationship, copywriting, and proper research methods. GRA\* K155 meets the Computer Literacy Requirement.

### GRA\* K230 (formerly ENG K229) **3 CREDIT HOURS DIGITAL IMAGING 1**

Prerequisite: GRA\* K140 or GRA\* K131 or permission of the instructor. Adobe Photoshop is the focus of this course which will provide students with a foundation in image manipulation and graphic design. This course concentrates on the high end capabilities of Photoshop as an illustration, design and photo-retouching tool. Students will explore a wide range of manipulation techniques that can be applied to photos and graphics. Students will also study design principles and read and report on Photoshop artists.

### **WEB DESIGN**

Prerequisites: ENG\* K101 or ENG\* K101S and GRA\* K140; or permission of the instructor. This computers graphics course is an introduction to the concepts of professional web site design using the Industry-standards-based website development tools Dreamweaver and Adobe Photoshop. Students will be able to create, prepare, and manipulate documents, illustrations, and images for the web. The four design principles of contrast, repetition, alignment, and proximity will be discussed and utilized to create a web site using the authoring tools described above as well as the skills acquired in the prerequisite courses.

### GRA\* K296 (formerly ENG K253) **3 CREDIT HOURS GRAPHIC ARTS INTERNSHIP**

Prerequisites: GRA\* K140; GRA\* K230; GRA\* K155; COM\* K291; and one other course in the program.

This practicum is a 200-level course which allows students to work in a facultyapproved position in a graphic arts, creative services, pre-press, or advertising or media outlet. The student will use their design skills as well as hardware and software skills acquired in their course work at the college to comprehensively study a selected technical area of graphics technology. Their supervisor as well as the assigned faculty member from Three Rivers will evaluate each student. As part of the evaluative process, students will present a portfolio of their work from their practicum.

# **HISTORY**

### HIS\* K121 (formerly HIS K121) **3 CREDIT HOURS** WORLD CIVILIZATION I

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is a survey of world cultures that have contributed importantly to the development of Western and Eastern thought. Consideration is given to institutions and ideas from prehistoric times through the evolution of ancient civilizations to the formation of empires and modern nation states. Major economic, political, and social forces are examined for their influence upon modern society. Course fulfills International/Intercultural Requirement.

### GRA\* K140 (formerly ENG K129) **3 CREDIT HOURS**

GRA\* K260 (formerly ENG K245) **3 CREDIT HOURS** 

### HIS\* K122 (formerly HIS K122) **3 CREDIT HOURS**

**Course Descriptions** 

### WORLD CIVILIZATION II

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.

This course is a continuation of the survey of world cultures (Early World Civilizations) from the Age of Discovery to the present. HIS\* K121 is not a prerequisite course for HIS\* K122. Course fulfills International/Intercultural Requirement.

### HIS\* K201 (formerly HIS K111) **3 CREDIT HOURS** U.S. HISTORY I

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.

This course is a survey of American history from colonial times to 1877 including the major political, economic, social, cultural, and diplomatic developments in American history, such as the revolution, the Constitution, Jefferson, Hamilton, Jackson, Sectionalism, slavery, mid-century expansionism and the Civil War, and Reconstruction.

### HIS\* K202 (formerly HIS K112) **3 CREDIT HOURS U.S. HISTORY II**

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is a survey of United States history from Reconstruction to Bush with special emphasis on the development of the American economy, United States expansionism, race relations, the world wars, women's rights, the cities, the sixties, the depression, the Cold War, Watergate, Vietnam, and the 1980's. (HIS\* K201 is not a prerequisite course for HIS\* K202).

### HIS\* K211 (formerly HIS K114) **3 CREDIT HOURS** HISTORY OF CONNECTICUT

Prerequisite: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor. This course covers the history of Connecticut from colonial times to the present. Emphasis is given to how Connecticut evolved from a colonial agricultural state to one of the largest manufacturing states in the Northeast. A sizable portion of the class is devoted to Southeastern Connecticut. Field trips to the many points of historical interest and outside speakers will be highlighted. This course is not a substitute for either HIS\* K201 or HIS\* K202.

### HIS\* K213 (formerly HIS K227) **3 CREDIT HOURS**

### THE U.S. SINCE WORLD WAR II

Prerequisite: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor.

This course examines recent United States history, beginning with World War II and continuing to the present. It will examine the important social, economic, cultural, and political developments that have shaped our world. It will also examine such themes as the United States rise as a super power, civil rights and civil disorder, social liberalism and conservatism, and labor and management in a changing world.

### HIS\* K218 (formerly HIS K226) **3 CREDIT HOURS AFRICAN AMERICAN HISTORY**

Prerequisite: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor. This course will examine critical events that have given shape to the history of African Americans as they struggled and continue to struggle for equality, opportunity and full participation in American life. The course begins on the African continent before the intense and prolonged contact and penetration of Europeans. We will discuss events that brought Africans to the new world and the subsequent events that gave shape to the history of African Americans in the United States. Correspondingly, we will identify key themes and issues, and discuss the contributions of important personalities and institutions that also gave shape and direction to the African American experience. Course fulfills International/Intercultural Requirement.

# HIS\* K220 (formerly HIS K228) **3 CREDIT HOURS**

**HISTORY OF THE AMERICAN WEST** Prerequisite: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor. This course examines the region west of the Mississippi River, beginning with an overview of the Native Americans and continuing with each new culture coming into the region. The major focus of the course will be an examination of the diverse cultures that have come together in the region and made the American West a unique place in American history. The course will also examine such themes as the role of the west in American history, the role of myth in Western history, women in the West, the "frontier," and the

environment versus the economy.

HIS\* K226 **3 CREDIT HOURS** 

### **U.S. CIVIL WAR**

Prerequisites: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor. This course will be an examination of the origins of the U.S. Civil War, its immediate consequences, and lasting effects for the nation, closely examining the social, political, economic and cultural forces during the period. Students will review such topics as slavery and the Constitution, industrialization and the market economy, sectional conflict, reform and abolitionism, and issues including race, class and gender.

### HIS\* K244 **3 CREDIT HOURS EUROPE IN THE 20TH CENTURY**

Prerequisite: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor.

This course will be a survey of the diplomatic, economic, political, social and intellectual history of Europe from 1914 to the present, highlighting its relationship with the rest of the world. Course fulfills International/Intercultural Requirement.

### HIS\* K246 **3 CREDIT HOURS** WORLD HISTORY THROUGH FILM

Prerequisites: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor. As primary documents of their time, films are studied to illuminate the historical era which they are made. This course will look at the political, social and intellectual history of world societies reflected in the films of various countries. This course fulfills the International/Intercultural course requirement.

### HIS\* K257 **3 CREDIT HOURS** WAR AND SOCIETY IN WORLD CIVILIZATION

Prerequisites: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor. This course is a survey of war and the military institutions of World society from the beginning of civilizations to the advent of the nuclear age. Emphasis will be placed on the evolution of war and its apparatus in the context of political, social, economic, and technological change. Course fulfills International/Intercultural Requirement.

HIS\* K271 (formerly HIS K221) **3 CREDIT HOURS** 



### **MODERN ASIA**

Prerequisite: ENG\* K101 or ENG\* K101S; and any 100 or 200 level Social Science course or permission of the instructor. This course will concentrate on develop-

Inis course will concentrate on developments in China and Japan since 1900, including the Chinese Revolution of 1911, the rise of militarism in Japan, World War II in the Pacific, the growth and triumph of communism in China, and the defeat and recovery of Japan. In addition, the course will examine both the Korean and Vietnam conflicts as well as contemporary problems in East Asia. Course fulfills International/Intercultural Requirement.

### HIS\* K296 (formerly HIS K298) 3 CREDIT HOURS TEACHING ASSISTANTSHIP IN HISTORY

Prerequisites: At least two prior courses in history and permission of the instructor. In this assistantship, students will assist a faculty member in conducting an academic course offered in the field of history. Students may lead discussion groups, work with individual students, organize field trips, make presentations, and/or other work to be arranged.

# **HEALTH SCIENCE**

### HLT\* K103 3 CREDIT HOURS INVESTIGATIONS IN HEALTH CAREERS

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course is designed to assist students in meeting the expectations of a health care curriculum and career. The students will become familiar with the rigors of higher education and the specific skills needed to maximize their opportunity for academic and clinical success. The course will include a comprehensive overview of the duties and responsibilities associated with clinical competency. Interdisciplinary learning strategies, correlating clinical and didactic education, life management skills, work ethics, and critical thinking skills necessary for all health provides will be emphasized.

### HLT\* K155 (FORMERLY HLT K111) 3 CREDIT HOURS PERSONAL HEALTH

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This is a course on the physiological principles involved in the maintenance of individual health. Students will learn principles of hygiene, nutrition, communicable disease prevention, stress management, exercise, and other elements of personal life style that affects health.

# HEALTH PHYSICAL EDUCATION

### HPE\* K105 3 CREDIT HOURS INTRODUCTION TO FITNESS AND TRAINING

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better. An introduction of the profession of Fitness Training and the five components of physical fitness, as it relates human anatomy and physiology, exercise, and nutrition to fitness and its effects on the body.

### HPE\* K128 3 CREDIT HOURS LIFETIME FITNESS

This course is designed to evaluate the 5 components of physical fitness. A physical fitness pretest will be conducted on each student and an individualized exercise program will be developed and implemented. Information involving nutrition, fitness and lifestyle will be presented so to educate the student to the aspects of lifetime fitness. Each student is required to take a physical fitness post test. A goal of the course will be to achieve a fitness level equal to or exceeding levels required by the Connecticut Police Officers Standards and Training Council Fitness Test Standard.

### HPE\* K130 3 CREDIT HOURS WEIGHT TRAINING/FITNESS

Prerequisite: ENG\* K096 placement∞ and MAT\* K095 or MAT\* K0951 placement∞. The student will gain knowledge of the muscular-skeletal system and the importance of exercise physiology, biochemistry, anatomy, biomechanics, and sports nutrition. Primarily, the student may apply these principles to design a safe, effective strength and conditioning program through weight training.

### HPE\* K136 1 CREDIT HOUR TAI CHI

Tai Chi was a form of internal Chinese martial art practiced for both its defense training and health benefits. Tai Chi today has become a modified exercise using all the techniques as a means to attain healing qualities rather than combative awareness. The slow and fluid movements practiced in Tai Chi improve the body's alignment, posture, strength, flexibility, coordination, balance and stamina. Tai Chi provides practitioners with an overall toning and strengthened of specific muscles.

### HPE\* K232 2 CREDIT HOURS FIRST AID & SPORTS INJURY

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. Introduction to basic life support skills and designed to certify each student in CPR with AED. The student will also be exposed to the most prevalent sports related injuries and their treatment, rehabilitation and strengthening protocols.

### HPE\* K241 4 CREDIT HOURS (w/ LAB) EXERCISE PHYSIOLOGY

*Prerequisite: ENG\* K101 or ENG\* K1015. Corequisite: BIO\* K211.* 

This class will cover physiological responses/adaptations to exercise. Topics in this course include neuromuscular, metabolic, cardiovascular, hormonal and respiratory systems as they pertain to acute and chronic exercise. The major goal of the class is to develop a basic understanding of exercise physiology that will 1) allow the student to utilize exercise physiology in their daily lives and future profession, 2) prepare the student to take additional courses in exercise science.

### HPE\* K243 4 CREDIT HOURS (w/ LAB) KINESIOLOGY

Prerequisites: ENG\* K101 or ENG\* K101S and BIO\* K211.

This course will be designed as a basic introduction to the fundamentals of Kinesiology. The integration of the anatomy of human movement and the mechanics of human movement will be the focal point of the course. Knowledge will be obtained through classroom lecture, hands on practical experiences, lab activities and other various assessment techniques. A broader understanding of human anatomy, through active movement and the application of this knowledge, in education, coaching, medicine and other areas of life in a practical method will be obtained.

### HPE\* K245 4 CREDIT HOURS PROGRAMMING AND PRESCRIPTION I

Prerequisite: HPE\* K105.

Students will be introduced to fitness assessment, testing and exercise criteria as well as guidelines for safe and efficient cardiovascular resistance and speed and agility training techniques. Exercise testing and prescription for healthy cardiovascular, respiratory, endocrine, skeletal and nervous systems will be stressed. Pulmonary diseases and post orthopedic injuries will also be included in the context of this course. The need for essential nutrient intake is another important aspect of this course.

### HPE\* K246 3 CREDIT HOURS PROGRAMMING AND PRESCRIPTION II

Prerequisite: HPE\* K245. This course is designed to introduce students to theories and techniques of exercise prescription for a variety of special populations (obese, diabetic, arthritic, pregnant, elderly, and the widely symptomatic). Guidelines for appropriate cardiovascular and resistance training for these groups will be discussed in detail. Protocols for prevention, diagnosis, treat-

ment and rehabilitation will be stressed.

### HPE\* K261 1 CREDIT HOUR YOGA

This 6,000 year old, ancient practice, will teach the student the true meaning of union by combining physical, mental and spiritual states of wellness. The course is designed to provide the history of yoga, its theory and benefits, and afford the student an opportunity to experience this art first hard.

### HPE\* K266 1 CREDIT HOUR THERAPEUTIC YOGA

Students will learn key components of spinal health and experience yoga practices fashioned around the major movements of the spine, hips and shoulders. The concepts and appropriate, mindful use of props for passive stretching to enable a meaningful, healing practice as well as the fundamentals of restorative yoga will be presented.

### HPE\* K267 1 CREDIT HOUR INTRODUCTION TO PRANAYAMA AND MEDITATION

This course will introduce the ancient practice of Pranayama (breath control) as a means of modulating our mental and physical activity levels. We will also explore meditation and the practice of Yoga Nidra (yoga sleep) as a means of rejuvenating our bodies and tapping into our inherent creativity. Both of these practices will be part of a traditional asana (movement) practice.

### HPE\* K295 3 CREDIT HOURS FIELD PRACTICE AND SEMINAR

Prerequisite: HPE\* K105 with a "C" grade or better; Two 200-level Exercise Science courses; ENG\* K101 or ENG\* K101S; student must have completed at least 30 credits of the Exercise Science program with a GPA of 2.5 or greater or have the permission of the program coordinator.

This practicum is designed to give the student an opportunity to implement the skills and knowledge gathered through their course work. This real world experience will enable the student grow their knowledge, increase their professional development and gain valuable work experience.

# **HUMAN SERVICES**

### HSE\* K101 (formerly HSV K110) 3 CREDIT HOURS INTRODUCTION TO HUMAN SERVICES

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is designed to familiarize students with the current theory and knowledge related to human services. The course will include a survey of the helping professions, including a history of social welfare and human service agencies. The course will include guest speakers and an opportunity to observe human service practice in local human services organizations. Students will be expected to complete 10 hours of volunteer service in the community.

### HSE\* K105 3 CREDIT HOURS CORE COMPETENCIES IN COMMUNITY HEALTH WORK

This course provides an introduction to the role of the Community Health Outreach Worker within the healthcare delivery team. Emphasis is placed on cooperative service to provide effective, efficient, and appropriate services to underserved clients in diverse communities. Students will develop skills in areas of communication, data collection, documentation, time management, and providing linkages with referral agencies for health and social service related issues. Activities such as field trips, guest speakers, and class discussions will be integrated into course work.

### HSE\* K171 (formerly HSV K199) 3 CREDIT HOURS DEATH & DYING

This course is designed to familiarize students with attitudes toward death, dying, grief, and loss. Students will be given

an opportunity to understand approaching death from several perspectives. The issues will include both the organizational context of dying, cross cultural studies of death, and the personal struggles of terminally ill people and their families.

### HSE\* K173 (formerly HSV K124) 3 CREDIT HOURS AGING & MENTAL HEALTH

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course focuses on the unique physiological, social, and emotional factors of aging that can affect the mental wellbeing of older adults. It also includes diagnosing and treating mental deterioration and studying its impact on the family.

# HSE\* K181 (formerly HSV K115) 3 CREDIT HOURS

**UNDERSTANDING SEXUAL ABUSE** Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096

with a "C#" grade or better. This course is designed to introduce the student to the problem of sexual abuse and assault, the psychology of the offender, and the impact on the victim. It will also provide a preliminary orientation to sex offender treatment and victim treatment.

### HSE\* K183 (formerly HSV K114) 3 CREDIT HOURS SUBSTANCE ABUSE

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This is a basic course in substance abuse and dependency. Topics will include an

overview of physiological, psychological and social aspects of substance abuse. This course will have application for human service majors and others interested in the field of chemical addiction.

# HSE\* K210 (formerly HSV K201) 3 CREDIT HOURS

**GROUP & INTERPERSONAL RELATIONS** *Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.* This course provides an overview of current group theory and knowledge of methods and skills leading to a beginning competence in group work practice. The course will combine theoretical and empirical concepts of group dynamics to be applied to a wide range of groups in a variety of settings.



### HSE\* K241 (formerly HSV K202) 3 CREDIT HOURS HUMAN SERVICE AGENCIES & ORGANIZATIONS

*Prerequisite: HSE\* K210 or permission of the instructor.* 

This course is an introduction to the study of community organization as a method in social work practice, which has as its major objective of practice the planning and implementation of programs directed toward some aspect of community change. The skills, methods, and functions of community service workers will be explored and integrated into the other skills and methods of social service practice, which are a part of a student's overall learning experiences in the social service program.

### HSE\* K251 (formerly HSV K152) 3 CREDIT HOURS WORK WITH INDIVIDUALS & FAMILIES

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course is designed to provide an introduction to methods and skills leading to beginning competence in the social work process of helping individuals and families. The skills include assessment, planning, contracting, intervention, interviewing, and evaluation.

# HSE\* K281 (formerly HSV K219) 3 CREDIT HOURS

# HUMAN SERVICES FIELD WORK I

Prerequisite: Permission of the instructor. This course is a practicum/field work experience in human services which is defined as direct involvement in a nonclassroom setting sponsored by the College and jointly supervised by the agency and faculty. Students are also expected to participate in a weekly seminar. Students must have completed a minimum of 30 credits with 12 credits in human service degree courses.

# HOSPITALITY MANAGEMENT

### HSP\* K100 (formerly HM K111) 3 CREDIT HOURS INTRODUCTION TO THE HOSPITALITY INDUSTRY

This course provides an overview of the structure and functions of the hospitality industry, including hotels, motels, inns, restaurants, resorts, casinos, and other tourist related concerns. Students will survey career options and the essential abilities needed to pursue these options. The course also introduces students to the many tourist attractions in southeastern Connecticut.

### HSP\* K108 (formerly HM K141) 3 CREDIT HOURS SANITATION & SAFETY

This course teaches students about the potential emergency situations in the hospitality industry and the appropriate and correct actions to take. Students will receive the National Restaurant Association's Certification in Food Sanitation and Safety required by law in the food service industry. Students will learn all aspects of sanitation including the ordering, receiving, storing, preparing, and serving of food.

### HSP\* K111 (formerly HM K101) 4 CREDIT HOURS BASIC FOOD PREPARATION

Corequisite: HSP\* K108. This course introduces the fundamental theories and skills in basic food preparation and baking. Emphasis is on the identification of a standard quality product, cooking theories, equipment, recipe conversion, weights and measures, and safe and sanitary working habits.

### HSP\* K112 (formerly HM K102) 4 CREDIT HOURS ADVANCED FOOD PREPARATION

Prerequisites: HSP\* K111 and HSP\* K108. This course is a continuation and application of the culinary techniques and knowledge acquired in HSP\* K111, Basic Foods. Full course menus will be prepared and served to guests. Students will experience various positions in the dining room and kitchen. Emphasis is placed on menu planning and recipes, purchasing, food costing, and service while working as part of a team.

### HSP\* K113 (formerly HM K204) 4 CREDIT HOURS BAKING AND PASTRY ARTS I

# Prerequisite: HSP\* K108.

This course is an introduction to the production and quality control of baked items and pastries with intensive handson laboratory training.

### HSP\* K117 (formerly HM K210) 3 CREDIT HOURS BEVERAGE MANAGEMENT

This course introduces students to wines, beers, spirits, and the technical aspects of the products. Viticulture, wine making, the distillation process, and the methods of making malt beverages are investigated. Students will explore the business aspects of buying, selling, and serving these products and the implications of liability and health in a contemporary society.

# HSP\* K134 (formerly HM K145) 3 CREDIT HOURS

# HOSPITALITY CUSTOMER RELATIONS

This course will focus on the relationship and interaction between the customer and the hospitality employee. A thorough investigation of the various aspects of communications between people will be studied. Students will learn effective communication skills in customer service and will implement these skills through role-playing and hands-on training.

### HSP\* K151 (formerly HM K131) 3 CREDIT HOURS

### INTRODUCTION TO GAMING INDUSTRY

This course introduces the student to the various operational aspects of the gaming industry. An overview of the current trends in the industry, the casino environment, marketing and financial concepts relevant to the industry will be addressed.

### HSP\* K152 (formerly HM K220) 4 CREDIT HOURS INTRODUCTION TO CASINO MANAGEMENT

Corequisite: HSP\* K100.

This course introduces the students to the management of a casino including staffing, the floor pit, credit control, cash and chip control, and internal security. Students are introduced to the basic rules and supervision of the major casino games.

### HSP\* K201 (formerly HM K201) 4 CREDIT HOURS INTERNATIONAL FOODS

Prerequisites: HSP\* K108 and HSP\* K112. This course teaches students to plan, prepare, and serve full-course ethnic meals. Student teams have the opportunity to practice advanced culinary, and management techniques. An analysis of costs, labor, production, management, and success of the team effort will be completed.

### HSP\* K243 (formerly HM K230) 4 CREDIT HOURS HOTEL OPERATIONS

Prerequisite: HSP\* K100.

This course focuses on the management of the various lodging options available to commercial and leisure travelers. The course will also focus on hotel/motel front office supervision and other management considerations in arranging the lodging.

# HSP\* K245 (formerly HM K245) 4 CREDIT HOURS

**HOSPITALITY SALES & MARKETING** *Prerequisites: ACC\* K111 and HSP\* K100.* This course is designed to familiarize the students with the sales and marketing practices used in the tourism field. Market analysis, methods of advertising, promotion, pricing, and sales techniques will be addressed.

#### HSP\* K247 (formerly HM K240) 4 CREDIT HOURS TRAVEL AGENCY OPERATIONS

Prerequisite: HSP\* K100.

This course is an introduction to the operations of the retail travel agency. Students will be provided an overview of computerized airline reservation systems, passenger tariffs, and ticketing procedures.

### HSP\* K296 (formerly HM K250) 3 CREDIT HOUR COOPERATIVE EDUCATION

Prerequisites: Permission of Program Coordinator.

This course is an on-the-job practical experience to reinforce the principal techniques and procedures presented in the classroom and lab. Students seek their own employment in an approved hospitality position and are evaluated by their employers, the program coordinator, and by the quality of their written assignments. Students meet for a cooperative, professional seminar and individually with the program coordinator several times throughout the semester.

# INTERDISCIPLINARY STUDIES

### IDS K105 3 CREDIT HOURS THE FIRST YEAR EXPERIENCE

Prerequisites: Completion of ESL\* K060 and ESL\* K061 if appropriate.

This course is designed to engage students as active participants within the college environment. Students will have the opportunity to acquire academic skills, attributes, awareness of self as learner, and to engage with the resources and activities within the Three Rivers Community College community. You can expect regular reading, writing and research assignments along with classroom discussion as you investigate how to be successful in this environment.

# LIBRARY SCIENCE TECHNOLOGY

### LIB\* K101 (formerly LIB K126) 3 CREDIT HOURS INTRODUCTION TO LIBRARY PUBLIC SERVICES

This course deals with the public service aspect of library work, which includes circulation, reserve, and publicity.

# LIB\* K104 (formerly LIB K115) 3 CREDIT HOURS

### **INTRODUCTION TO REFERENCE SERVICES** *Prerequisite: CSA\* K105.*

This course is designed to familiarize students with the use of general and specialized reference tools. Procedures and services in the library reference department are also discussed.

### LIB\* K116 (formerly LIB K116) 3 CREDIT HOURS CATALOGING AND CLASSIFICATION

Prerequisite: LIB\* K123.

This course introduces both Dewey and Library of Congress Classification Systems. Also included are original descriptive and subject cataloging of print and non-print media, and copy cataloging by using MARC format.

### LIB\* K120 (formerly LIB K120) 3 CREDIT HOURS LITERATURE FOR CHILDREN

This course is a critical study of literature for children. Included are literary forms such as folklore, poetry, fiction, drama, and nonfiction. Discussions of writers, illustrators, storytelling, and Children's Room programming are also incorporated.

### LIB\* K121 (formerly LIB K121) 3 CREDIT HOURS LITERATURE FOR YOUNG ADULTS

This course is a critical study of literature for adolescents. Included are classical works as well as contemporary writings for the secondary school age level. Programming for young adults is also included.

### LIB\* K123 (formerly LIB K123) 3 CREDIT HOURS INTRODUCTION TO LIBRARY TECH SERVICES

This course is designed to give students an understanding of the use of bibliographic tools, the skills to use them appropriately, and a basic knowledge of workflow in a technical processing department.

### LIB\* K125 (formerly LIB K125) 3 CREDIT HOURS DIGITAL MEDIA

This course serves as an introduction to a variety of digital media forms as they are being used in the library and information service fields. Students will be exposed to such presentation software such as Facebook, Flickr, BitTorrent, Secondlife, podcasts, audiobooks, ebooks, Mp3 and Mp4 files. Students will also use digital cameras and sound recorders to create original content.

### LIB\* K127 (formerly LIB K127) 3 CREDIT HOURS MANAGEMENT STRATEGIES

This course covers the basic supervisory skills that are necessary for library technical assistants. Topics included are job descriptions, employee evaluation, motivation, conflict management, interpersonal communication, time management, training techniques, affirmative action, usage statistics, censorship, and Library Bill of Rights.

### LIB\* K201 (formerly LIB K201) 3 CREDIT HOURS DIGITAL RESOURCES

Prerequisite: CSA\* K105.

This course covers the theory and field practice of web sites, internet searching and search engines, online reference searches, shared databases, LANs, CD ROM technology, and library networks. LIB\* K201 meets the computer literacy requirement.

### LIB\* K202 (formerly LIB K202) 3 CREDIT HOURS SUPERVISED FIELD PLACEMENT∞

Prerequisite: Completion of five library technology courses.

This course is a work assignment under actual library conditions that gives students practical experience. During the semester, students will work 90 hours in a library of their choice. This course is required for students with no practical library experience.

# MATHEMATICS

### MAT\* K095I 6 CREDIT HOURS ELEMENTARY ALGEBRA INTENSIVE COLLEGE READINESS

This Elementary Algebra developmental course prepares students for college level courses. Designed to build understanding and skills in algebra, it also provides embedded pre-algebra support. The course develops understanding of number system, different representations of numbers, operations on numbers, including numbers expressed in scientific notation. The course introduces functions, their graphs, modeling relationship between quantities using functions. Topics also include solving equations and expressions with integer exponents, radicals, solving, analyzing and modeling linear equations, systems of linear equations. Pythagorean Theorem and geometrical formulas are used to solve real world problems.



**Course Descriptions** 

### **MAT\* K095** (formerly MAT K090 Elementary Algebra) 3 CREDIT HOURS **ELEMENTARY ALGEBRA FOUNDATIONS**

Prerequisite: MAT\* K075 with a "C#" grade or better or MAT\* K090 with a P# or appropriate placement∞ through multiple-measures assessment process.

Please refer to online schedule and click on the CRN hyperlink and/or review printed schedule in determining which faculty require math software in their course(s). This developmental course prepares students for college level courses. The course develops understanding of number systems, different representations of numbers, operations on numbers, including numbers expressed in scientific notation. The course introduces functions, their graphs, modeling relationships between quantities using functions. Topics also include solving equations and expressions with integer exponents, radicals, solving, analyzing and modeling linear equations, systems of linear equations, Pythagorean Theorem and geometrical formulas are used to solve real world problems.

# **MAT\* K123 3 CREDIT HOURS ELEMENTARY STATISTICS**

Prerequisite: MAT\* K095 or MAT\* K095I with a "C#" grade or better or appropriate placement∞ through multiple-measures assessment process.

This course considers fundamental concepts of probability and statistics. The topics include exploratory data analysis (tables, graphs, measures of central tendency and dispersion), basic probability, applications of binomial and normal distributions, confidence intervals, hypothesis testing and Chi-Square Goodness-of-Fit Test.

### MAT\* K135 (formerly MAT K108) **3 CREDIT HOURS TOPICS IN CONTEMPORARY MATH**

Prerequisite: MAT\* K095 or MAT\* K095I

with a "C#" grade or better or appropriate placement∞ through multiple-measures assessment process.

A graphing calculator is required. Instructor will use a Texas Instrument calculator (TI-84). This course will expose students to topics in mathematics that are useable and relevant in today's world. Students will apply mathematical ideas while working within a social context. Examples of topics will include: concerns about the growth of the national debt, environmental issues, probability, statistical implications in our lives, and current events issues.

### MAT\* K137 (formerly MAT K109) **3 CREDIT HOURS INTERMEDIATE ALGEBRA**

Prerequisite: MAT\* K095 or MAT\* K0951 with a "B-#" grade or better or appropriate placement∞ through multiple-measures assessment process.

Please note: A graphing calculator is required. Instructor will use a Texas Instrument calculator (TI-84).

This course cultivates understanding and different representations of functions. The course covers linear, quadratic, exponential, rational, radical functions, equations and expressions and operations on them with emphasis on modeling and solving real world problems.

### **MAT\* K137S 4 CREDIT HOURS INTERMEDIATE ALGEBRA EMBEDDED**

Prerequisite: MAT\* K095 or MAT\* K095I with a "C-#" or higher, or appropriate placement∞ through multiple measures assessment process.

This course represents the Intermediate Algebra instruction with embedded developmental support. The course cultivates understanding and different representations of functions. The course covers linear, quadratic, exponential, rational, radical functions, equations and expressions and operations on them with emphasis on modeling and solving real world problems.

### MAT\* K143 **3 CREDIT HOURS** MATH FOR ELEMENTARY EDUCATION: ALGEBRA AND NUMBER SYSTEMS

Prerequisite: MAT\* K137 or MAT\* K137S with a "C" grade or better or appropriate placement∞ through multiple-measures assessment process. A TI-84(Plus) or TI-83(Plus) or TI-82 or TI-73 graphing calculator is strongly recommended.

This course is designed for students planning to become certified in early childhood, elementary or middle school level education. Problem solving strategies will be developed and integrated throughout. in accordance with the NCTM Principles and Standards for School Mathematics. Topics include conceptual and relational understanding of the real numbers, including the subsets of whole numbers, integers, rational and irrational numbers, with an emphasis on place value and the associated operations. Topics from numeration systems, number theory and set theory will be developed as needed, with regular use of manipulatives and technology.

# MAT\* K146 (formerly MAT K114) **3 CREDIT HOURS**

### MATH FOR THE LIBERAL ARTS

Prerequisite: MAT\* K137 or MAT\* K137S with a "C" grade or better or appropriate placement∞ through multiple-measures assessment process.

A graphing calculator is required. Instructor will use a Texas Instrument calculator (TI-84). This course meets the mathematics requirement for liberal arts (non-science) transfer students. The topics covered are selected from set theory, counting and probability, and basic statistics, linear programming, game theory, Markov process, difference equations, and mathematical modeling.

### **MAT\* K167 3 CREDIT HOURS PRINCIPLES OF STATISTICS**

Prerequisite: MAT\* K137 or MAT\* K137S with a "C" grade or better or appropriate placement∞ through multiple-measures assessment process. Please refer to online schedule and click on the CRN hyperlink and/or review printed schedule in determining which faculty require math software in their course(s).

This course introduces the basic concepts of statistics as they apply primarily to business, the technologies, and the social sciences. The topics include methods of summarizing data, measures of central tendency and dispersion, correlation and linear regression, basic probability, binomial and normal distributions, hypothesis testing for one and two populations and confidence intervals.

### MAT\* K172 **3 CREDIT HOURS COLLEGE ALGEBRA**

Prerequisites: MAT\* K137 or MAT\* K137S with a "C" grade or better or appropriate placement∞ through multiple-measures assessment process.

This course is a thorough and rigorous algebra course, that strengthens the proficiency with algebraic skills and the conceptual understanding needed to be successful in the Calculus sequence. The topics include: sets, polynomial, exponential, logarithmic and rational functions, rational exponents, conic sections, right triangle trigonometry, matrices, polynomial, exponential, logarithmic and radical equations, linear and quadratic inequalities, absolute value equations and inequalities, linear and nonlinear systems.

### MAT\* K186 (formerly MAT K141) 4 CREDIT HOURS PRECALCULUS

Prerequisite: MAT\* K172 with a "C" grade or better or appropriate placement∞ through multiple-measures assessment process. Please note: A graphing calculator is required. Instructor will use a Texas Instrument calculator (TI-84 or TI-89). This course prepares students for the study of Calculus I. It is the study of functions, their graphs and applications. The topics include polynomial and rational functions and their graphs, operations on radical expressions, matrices, exponential and logarithmic functions, trigonometric functions and their graphs, trigonometric identities, trigonometric applications, and determinants.

### MAT\* K210 3 CREDIT HOURS DISCRETE MATH

Prerequisite: MAT\* K186 or permission of the instructor.

This course provides an introduction to set theory, logic and number theory. The ideas of algorithms and proof will be developed through the content.

#### MAT\* K254 (formerly MAT K151) 4 CREDIT HOURS CALCULUS I

Prerequisite: MAT\* K186 with a 'C" grade or better.

This is a first course in the calculus sequence intended for students who plan on majoring in mathematics, physical sciences, or engineering technology. Topics include: rate of change, limits, continuity, differentiation of algebraic, trigonometric, exponential, and logarithmic functions, differentials, applications of differentiation, definite and indefinite integrals, and applications of integration.

### MAT\* K256 (formerly MAT K152) 4 CREDIT HOURS CALCULUS II

Prerequisite: MAT\* K254 with

a "C" grade or better.

This course is the second semester of calculus intended for students who plan on majoring in mathematics, physical science, or engineering technologies. The topics include the definite integral, applications of integration, methods of integration, sequences, series and vectors.

### MAT\* K268 4 CREDIT HOURS CALCULUS III: MULTIVARIABLE Prerequisite: MAT\* K256 with

a "C" grade or better.

This third semester of calculus is intended for students who plan on majoring in mathematics, science or engineering technologies. It exposes students to the calculus of several variables. Topics include vectors, dot and cross product, equations of lines and planes, functions of several variables, limits and continuity, partial derivatives, chain rule, gradient, maximizing and minimizing functions of several variables, Lagrange multipliers, multiple integrals, polar, cylindrical, spherical coordinate systems, vector fields, line integrals, Green's and Stokes' and the Divergence Theorems.

### MAT\* K272 3 CREDIT HOURS LINEAR ALGEBRA

*Prerequisite: MAT\* K256 with a "C" grade or better.* 

A first course in linear algebra for students in mathematics, science and engineering. Topics include: systems of linear equations, matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors. The course is an introduction to the techniques of linear algebra with elementary applications.

# MAT\* K285 (formerly MAT K251) 3 CREDIT HOURS

## DIFFERENTIAL EQUATIONS

*Prerequisite: MAT\* K256 with a "C" grade or better.* 

A continuation of calculus with an introduction to standard techniques of solving differential equations. The following topics will be introduced: first-order differential equations, linear equations of higher order, power series methods, Laplace transform methods, linear systems of differential equations, numerical methods, and modeling by differential equations in a variety of applications in physics, chemistry, engineering, biology, social sciences and finances.

# MECHANICAL ENGINEERING TECHNOLOGY

### MEC\* K114 (formerly MEC K1106) 3 CREDIT HOURS STATICS

Prerequisites: MAT\* K172 and PHY\* K114. Corequisite: MAT\* K186. This course helps students develop the ability to analyze problems using the basic principles of static systems in order to provide a foundation for stress analysis. The forces on structures in equilibrium and concepts of centroids, center of gravity, and moment of inertia are studied. The concept of stress and strain in axial torsional and bending loading is also introduced.

### MEC\* K150 1 CREDIT HOUR SOLID MODELING I

Corequisite: MEC\* K151. This course and accompanying lab is designed to expand and enhance the student's ability to combine and apply mechanical design principles with com

student's ability to combine and apply mechanical design principles with computer design techniques and capabilities. This course teaches the basic concepts of orthographic projection, isometric, and oblique drawings and basic drafting terminology. A component of this course will focus on descriptive geometry which will nurture the visualization skills of students by identifying points, planes, and perpendiculars in various perspectives. Introducing the mechanical design software SolidWorks, this course begins to examine the basic functionality of drawing automation. One hour lecture/discussion and four hours of lab per week.

# MEC\* K151 2 CREDIT HOUR SOLID MODELING I LAB

Corequisite: MEC\* K150. This lab in conjunction with the corresponding lecture is designed to expand and enhance the student's ability to combine and apply mechanical design principles with computer design techniques and capabilities. This course teaches the basic concepts of orthographic projection, isometric, and oblique drawings and basic drafting terminology. A component of this course will focus on descriptive geometry which will nurture the visualization skills of students by identifying points, planes, and perpendiculars in various perspectives. Introducing the mechanical design software SolidWorks, this course begins to examine the basic functionality of drawing automation. One hour lecture/discussion and four hours of lab per week.

### MEC\* K152 (formerly MEC K1110) 1 CREDIT HOUR FUNDAMENTALS OF ENGINEERING GRAPHICS

Prerequisite: MAT\* K095 OR MAT\* K095I or higher.

Corequisite: MEC\* K153.

This course teaches the basic concepts of orthographic projection, isometric, and oblique drawings and basic drafting terminology. Emphasis will also be placed on



freehand sketching using the above concepts and terminology. Basic principles of simplified board drafting practices will be covered. A major component of this course will focus on descriptive geometry which will nurture the visualization skills of students by identifying points, planes, and perpendiculars in various perspectives. Some of the techniques will be accompanied with CAD as a comparison.

### MEC \* K153 (formerly MEC K1111) 2 CREDIT HOURS FUNDAMENTALS OF ENGINEERING GRAPHICS LAB

# Prerequisite: MAT\* K095 OR MAT\* K095I or higher.

Corequisite: MEC\* K152.

This lab and accompanying lecture is designed to introduce students to the concept of applying mechanical design principles with computer designed techniques and capabilities. This course teaches the basic concepts of orthographic projection, isometric, and oblique drawings and basic drafting terminology. A component of this course will focus on descriptive geometry which will nurture the visualization skills of students by identifying points, planes and perpendiculars in various perspectives. Introducing the mechanical design software SolidWorks, this course begins to examine the basic functionally of drawing automation. One hour lecture/discussion and four hours of lab per week.

### MEC\* K154 1 CREDIT HOUR SOLID MODELING II

*Prerequisite: MEC\* K150 and MEC\* K151. Corequisite: MEC\* K155.* 

This course in conjunction with the corresponding lab is designed to further enhance the students ability to combine and apply mechanical design principles with Solidworks. This course continues to examine the basic functionality of drawing automation. In addition, this course will introduce the concepts of geometric dimensioning and tolerancing by presenting an overview of a positional tolerance system, its relationship to coordinate tolerance systems, and other aspects of industry standard drafting practices. One hour lecture.

### MEC\* K155 2 CREDIT HOURS SOLID MODELING II LAB

Prerequisite: MEC\* K150 and MEC\* K151. Corequisite: MEC\* K154. This lab in conjunction with the corresponding lecture is designed to further enhance student's ability to combine and apply mechanical design principles using Solidworks. This course continues to examine the basic functionality of drawing automation. In addition, this course will introduce the concepts of geometric dimensioning and tolerancing by presenting an overview of a positional tolerance system, its relationship to coordinate tolerance systems, and other aspects of industry standard drafting practices. Four hour lab.

### MEC\* K231 (formerly MEC K2166) 1 CREDIT HOUR

### **COMPUTER-AIDED ENGINEERING** *Prerequisite: CSA\* K105.*

Corequisite: MEC\* K232.

This course is a continuation of Computer Application I with a primary emphasis upon the personal computer as a problem solving tool for mechanical students. Upon completion of this course, students will have an awareness of (1) existing mechanical software on the market, (2) an application media for concepts learned in Computer Applications I, and (3) computer solution methods for complex mechanical problems.

### MEC\* K232 (formerly MEC K2167) 2 CREDIT HOURS

### **COMPUTER-AIDED ENGINEERING LAB** *Prerequisite: CSA\* K105.*

Corequisite: MEC\* K231.

This course teaches students to performs laboratory exercises to fulfill the goals of MEC\* K231. The purpose of the lab is to provide relevant projects for computer applications as applied to the mechanical discipline.

### MEC\* K241 (formerly MEC K2162) 3 CREDIT HOURS THERMODYNAMICS

Prerequisites: PHY\* K115 and MAT\* K186. This course studies the thermodynamic principles of heat, work, non-flow and steady flow processes, and cycles. The use of thermodynamics data tables and charts will be stressed.

### MEC\* K250 (formerly MEC K2120) 3 CREDIT HOURS STRENGTH OF MATERIALS

Prerequisites: MEC\* K114.

*Corequisites: MEC\* K252.* This course instills knowledge of moments of inertia, torsion, bending, and columns, and how it applies to stress and the structural properties of materials. The relationship of these properties to common engineering problems is reviewed.

### MEC\* K252 1 CREDIT STRENGTH OF MATERIALS LAB

Prerequisites: MEC\* K114. Corequisites: MEC\* K250. This laboratory is intended to reinforce the principles of Strength of Materials and Statics by a combination of different physical experiments whereby deflection of materials can be measured, as well as calculating appropriate reactions and determining the strength of materials utilizing a series of equipment as part of this laboratory exercise.

#### MEC\* K262 (formerly MEC K2122) 3 CREDIT HOURS MATERIALS SCIENCE

Prerequisites: MFG\* K102/103. Corequisite: MEC\* K263. This course studies the structure and properties of engineering materials, and incorporates the presentation of materials selection, processing, and heat treatment. The changes in structure and properties during forming, machining, and heat treating operations are discussed.

#### MEC\* K263 (formerly MEC K2123) 1 CREDIT HOUR MATERIALS SCIENCE LAB

Prerequisites: MFG\* K102/103 and TCN\* K105.

Corequisite: MEC\* K262.

In this lab, students will be exposed to selected experiments demonstrating the effects of processing, including heat treatment, on the properties of engineering materials. Standard materials tests are also performed.

# MEC\* K270 (formerly MEC K2124) 3 CREDIT HOURS

### **INTRODUCTION TO FLUID MECHANICS** *Prerequisites: MAT\* K186.*

Corequisite: MEC\* K275.

This course introduces the mechanics of fluids. Basic characteristics of fluids, hydrostatics, pressure, centers of pressure, and pressure measuring devices are discussed. The application of the general energy equation to fluids in motion is also shown, along with the modifications necessary to introduce the effects of viscosity and friction on fluid flow, pressure heads, and pump calculations.

### MEC\* K272 (formerly MEC K2126) 4 CREDIT HOURS

### **FLUID MECHANICS/THERMODYNAMICS** *Prerequisite: PHY\* K115.*

This course investigates the behavior of fluids from a fluid mechanics and thermodynamics point of view, including the concepts of enthalpy, entropy, and energy balances.

### MEC\* K274 (formerly MEC K2140) 2 CREDIT HOURS HEAT TRANSFER

Prerequisites: MAT\* K254; MEC\* K272; PHY\* K115.

Corequisite: MEC\* K275.

This course will include one and two dimension flow, and principles of convection, conduction, and radiation. Steady state conditions will be investigated.

#### MEC\* K275 (formerly MEC K2142) 1 CREDIT HOUR THERMAL SCIENCES LAB

*Corequisites: MAT\* K254; MEC\* K241 or MEC\* K270 or MEC\* K272.* This course studies selected labs from the fields of fluid mechanics, thermodynamics, and heat transfer.

### MEC\* K281 (formerly MEC K2130) 3 CREDIT HOURS MACHINE DESIGN

Prerequisite: MEC\* K250. Corequisite: MEC\* K282. This course utilizes skills from previous courses and gives students the opportunity to investigate the design of machine elements. Actual design conditions are

studied along with classical engineering design practice utilizing the concepts of stress, materials, unimatics, economy, safety, strength, and appearance.

### MEC\* K282 (formerly MEC K2131) 2 CREDIT HOURS MACHINE DESIGN LAB

Prerequisite: MEC\* K250. Corequisite: MEC\* K281. This course allows students to create actual designs in the laboratory, including the students' senior design project.

### MEC\* K286 (formerly MEC K2156) 3 CREDIT HOURS WELDING ENGINEERING APPLICATIONS

*Prerequisites: MFG\* K102/103; MEC\* K262/263.* 

Corequisite: MEC\* K287.

This course introduces basic welding techniques as applied to various welding materials. It includes ARC welding, filler materials, steel welding, non-ferrous metal welding, and problems in welding with solutions.

### MEC\* K287 (formerly MEC K2157) 1 CREDIT HOUR WELDING ENGINEERING APPLICATIONS LAB

Prerequisites: MFG\* K102/103; MEC\* K262/263. Corequisite: MEC\* K286. This course applies the basic welding techniques and principles of MEC\* K286 to various welding materials. It includes lectures, film strips, and various welding projects.

### MEC\* K295 (formerly MEC K2995) 3 CREDIT HOURS MECHANICAL ENGINEERING TECHNOLOGY CO-OP

Prerequisite: Permission of the program coordinator.

Corequisite: Student must have completed all freshman level technology courses and have a GPA of 2.50 or better.

This course gives students the opportunity to work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co- op student during the semester internship.

# **MEDICAL**

### MED\* K125 3 CREDIT HOURS MEDICAL TERMINOLOGY

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is intended for students interested in obtaining a knowledge and understanding of basic medical terminology as the language of the health care professional. The student learns basic medical word roots and combining forms, suffices, prefixes, and abbreviations. Correct spelling, forming singulars and plurals, understanding definitions, and using terms correctly are important components of the course. This course is especially useful for individuals working in the healthcare or pursuing a degree in an allied health area.

# MANUFACTURING ENGINEERING TECHNOLOGY

### MFG\* K102 (formerly MFG K1100) 3 CREDIT HOURS MANUFACTURING PROCESSES

Corequisite: MFG\* K103.

This course studies manufacturing: making goods and wares by industrial processes. The course will provide theoretical experience in the scientific, engineering, and economic principles on which the various manufacturing processes are based.

# MFG\* K103 (formerly MFG K1101) 1 CREDIT HOUR

MANUFACTURING PROCESSES LAB

Corequisites: MFG\* K102 and TCN\* K105. This course provides laboratory emphasis on common metal cutting tools and lathe operations, as well as on associated precision measuring tools and instruments. The labs will involve set-ups and procedures for milling machines, lathes, grinders, drill presses, and some measuring instruments.

### MFG\* K118 (formerly MFG K1104) 3 CREDIT HOURS COMPUTER CONTROLLED LASER MATERIALS PROCESSING

Prerequisites: TCN\* K105; PHO\* K101 or MEC\* K262 or permission of instructor. Corequisite: MFG\* K119.

A study of the mechanics, components, characteristics and control of lasers used in the processing of engineering materials. The differences between laser material processing and conventional methods will be examined. The interactions between laser beams and materials on atomic and macro scales will be discussed. Specific processes such as a thermal processing, surface hardening, and cladding, joining, cutting, marking and welding will be introduced. Students will be exposed to computer numerical control (CNC) concepts and programming.

### MFG\* K119 (formerly MFG K1105) 1 CREDIT HOUR COMPUTER CONTROLLED LASER MATERIALS PROCESSING LAB

Prerequisites: TCN\* K105; PHO\* K101 or MEC\* K262; or permission of instructor. Corequisite: MFG\* K118. The lab will provide hands-on experiences reinforcing and supplementing the course content. Labs will be conducted at a regional site.

### MFG\* K171 3 CREDIT HOURS INTRODUCTION TO LEAN MANUFACTURING

The purpose of this course is to provide the student with the fundamental knowledge of current continuous process improvement methodologies in use today within competitive manufacturing environments. This introductory course will expose the student to the basic concepts of Lean Manufacturing theory and the various tools and techniques involved with a lean implementation. This course will be presented following the lean-six sigma process methodology of DMAIC (Define, Measure, Analyze, Improve, Con-



trol) to ensure that at the completion of the course, the student will be competent to participate effectively as a team member in lean implementation projects.

#### MFG\* K172 3 CREDIT HOURS INTRODUCTION TO LEAN SUPPLY CHAIN MANAGEMENT

This course is an introduction to the basic principles and methodologies of Supply Chain Management. The course reviews the lean manufacturing principles needed to understand and maintain the supply chain. Key concepts are covered such as Value Stream Mapping, customer/supplier roles, supplier types, metrics, quality systems, quality audits, communication, and information flow. Class activities, group assignments, and case studies are emphasized for real- world learning experiences.

#### MFG\* K221 3 CREDIT HOURS MECHATRONICS

Corequisites: EET\* K264 and EET\* K265. This interdisciplinary course exposes students to the design, instrumentation, and control of high-precision, computercontrolled automation equipment, using concrete examples drawn from the photonics, biotech, manufacturing and semi-conductor industries. Topics covered include design strategy, high-precision mechanical components, sensors and measurement, servo control, design for controllability, control software development, controller hardware, as well as automated error detection and recovery. Students will work individually and in teams on hands-on experiences reinforcing and supplementing the course content. This course is equivalent to EET\* K266 Automated Controls.

#### MFG\* K222 1 CREDIT HOUR MECHATRONICS LAB

Corequisites: EET\* K264 and EET\* K265. This inter-disciplinary lab course exposes students the design, instrumentation and control of high- precision, computer controlled automation equipment, using concrete examples drawn from the photonics, biotech, manufacturing and semi conductor industries. Topics covered include design strategy, high precision mechanical components, sensors and measurement, servo control, design for controllability, control software developmental, controller hardware, as well as automated error detection and recovery. Student will work individually and in teams on hands-on experiences reinforcing and supplementing the course content.

#### MFG\* K230 3 CREDIT HOURS STATISTICAL PROCESS CONTROL Corequisite: MAT\* K167.

This course presents the application of fundamental statistical concepts to manufacturing production control, tolerance analysis and acceptance sampling. Emphasis is placed on the application of statistics through control chart development, sampling size determination and frequency evaluation. The course incorporates computer hardware and software, particularly spread sheets and database programs in SPC applications to manual, automated and flexible manufacturing systems in a computer integrated environment. This course is equivalent to BMG\* K218.

#### MFG\* K236 (formerly MFG K2236) 3 CREDIT HOURS NON-DESTRUCTIVE TESTING I

Corequisite: MFG\* K237.

This course is an introduction to the non-destructive testing techniques most commonly used in industry. These include liquid penetrate, magnetic particle, eddy current, ultrasonic's, radiography, and others. Requirements for personnel certification are also addressed.

#### MFG\* K237 (formerly MFG K2237) 1 CREDIT HOUR NON-DESTRUCTIVE TESTING I LAB

Corequisite: MFG\* K236.

This lab is an introduction to the practical application of non-destructive testing equipment and techniques. Liquid penetrate, magnetic particle, eddy current, ultrasonic's, and radiographic inspection will be performed, evaluated, and documented.

#### MFG\* K239 (formerly DFT K1115) 3 CREDIT HOURS GEOMETRIC DIMENSIONING AND TOLERANCING

Prerequisites: CAD\* K106/107 and latest CAD release working knowledge. This course will introduce the concepts of Geometric Dimensioning and Tolerance with respect to design and inspection considerations. The entire content will be based upon the ASME Y14.5M- 1994 standards. The concepts of proper dimensioning and tolerance methods with clear distinct outcomes will be defined. The use of computer aided drafting will aid in the delivery of the GDT concepts. This course is equivalent to CAD\* K239.

## MFG\* K271 3 CREDIT HOURS ADVANCED LEAN MANUFACTURING

Prerequisite: MFG\* K171. The purpose of this course is to provide the student with the knowledge to implement lean improvements within the production environment using a systematic approach. This course will follow an improvement project (from the student's current employer or case study) through the five stages of the DMAIC problem solving methodology. At the completion of the course, the student will be competent to effectively lead a lean implementation project within a company.

#### MFG\* K272 3 CREDIT HOURS IMPLEMENTING LEAN SUPPLY CHAIN MANAGEMENT

Prerequisites: MFG\* K172.

This course covers the benefits and elements needed for implementing supply chain management. Team building and communication skills are shown as crucial factors in supply chain management. Topics emphasized in the course are measuring the velocity of the supply chain, developing partnerships, logistics, software tools, hardware, and continuous improvement. Class activities, group assignments and case studies are emphasized for real-world learning experiences.

#### MFG\* K295 (formerly MFG K295) 3 CREDIT HOURS MANUFACTURING ENGINEERING TECHNOLOGY CO-OP

Prerequisite: Permission of the program coordinator.

Corequisites: Students must have completed all freshman level technology courses and have a GPA of 2.50 or better. In this course, students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/ laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester internship.

# MUSIC

#### MUS\* K101 (formerly MUS K111) 3 CREDIT HOURS MUSIC HISTORY & APPRECIATION I

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better. This course is designed to introduce the student to the elements of music: melody, rhythm, harmony, tone, color, and form. A repertory of music literature is surveyed to trace both the development of Western music and the heritage of contemporary popular music.

#### MUS\* K104 3 CREDIT HOURS WORLD MUSIC

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. A comparative survey of musical concepts, style, and performance practices of various world cultures. Course content will emphasize the context of musical expression within the different cultures examined. This course is equivalent to ANT\* K136. Course fulfills International/ Intercultural Requirement.

# NUCLEAR ENGINEERING TECHNOLOGY

## NUC\* K100 (formerly NUC K1103) 3 CREDIT HOURS

**INTRODUCTION TO NUCLEAR SYSTEMS** This course is an introduction to the major systems of a commercial nuclear power plant. Designed for the student with no prior knowledge of engineering principles, it adheres to a systematic approach to operations and explains the underlying theoretical principles. The course focuses on Pressurized Water Reactor (PWR) and Boiling Water Reactor (BWR) plant design. The course also presents an overview of the Pressurized Heavy Water Reactor (PHWR), Fast Breeder Reactor (FBR), and High Temperature Gas-cooled Reactor (HTGR).

#### NUC\* K110 (formerly NUC K1100) 2 CREDIT HOURS RADIATION HEALTH SAFETY

Prerequisites: MAT\* K186 and CHE\* K121. Corequisites: NUC\* K111 and NUC\* K117. This course is an introduction to basic concepts associated with nuclear physics and nuclear radiation, health, and safety. Topics include nuclear structure, radioactivity, and interaction of radiation with matter, shielding, radiation measurement, exposure, and biological effects.

#### NUC\* K111 (formerly NUC K1101) 1 CREDIT HOUR RADIATION HEALTH SAFETY LAB

Prerequisites: MAT\* K186 and CHE\* K121. Corequisites: NUC\* K110 and NUC\* K117. This course is designed to give the student hands-on experience working with a variety of radiation monitoring devices. The students will also gain experience in the processing and analysis of counting data.

## NUC\* K117 (formerly NUC K1107) 4 CREDIT HOURS

ATOMIC AND REACTOR PHYSICS Prerequisites: MAT\* K186; NUC\* K100; PHY\* K114.

Corequisites: MAT\* K254; PHY\* K115; NUC\* K110/111.

This course is an introduction to modern physics concepts of the structure of the atom, the properties of atomic particles, the nature of light, relativity theory and elementary quantum mechanics. An understanding of fission energy concepts and transmutations will be provided.

#### NUC\* K118 (formerly NUC K1117) 1 CREDIT HOUR NUCLEAR CHEMISTRY

Prerequisites: CHE\* K121; MAT\* K186; NUC\* K100.

*Corequisite: NUC\* K117.* This course is an introduction to the basic concepts of nuclear reactor chemistry. Topics covered include oxidation-reduction reactions, principles of corrosion, corrosion control practices, and important nuclear chemical reactions.

## NUC\* K210 (formerly NUC K2100) 2 CREDIT HOURS

NUCLEAR INSTRUMENTS AND CONTROL

Prerequisites: EET\* K144/145; NUC\* K100; NUC\* K110/K111; NUC\* K117; NUC\* K250. Corequisites: NUC\* K211; NUC\* K220/K221. The study of the underlying electrical, mechanical, physical, and chemical principles by which the instrumentation and modern PWR (pressurized water reactor) and BWR (boiling water reactor) systems control the safe generation of nuclear-based power. Emphasis is placed on the full understanding of the nuclear fission process and the interactions of the numerous subsystems required monitoring and controlling this important energy technology.

#### NUC\* K211 (formerly NUC K2101) 1 CREDIT HOUR NUCLEAR INSTRUMENTS AND CONTROL LAB

Prerequisites: EET\* K144/145; NUC\* K100; NUC\* K110/111; NUC\* K117; NUC\* K250. Corequisites: NUC\* K210; NUC\* K220/K221. These laboratory exercises transfer acquired electrical, mechanical, physical, and chemical technology gained in earlier courses in hands-on applications to 15 selected nuclear instrument controlled subsystems. Emphasis is placed on the full understanding of the detection capabilities and subsequent safe nuclear system control.

#### NUC\* K220 (formerly NUC K2110) 1 CREDIT HOUR NUCLEAR SIMULATOR

Prerequisites: NUC\* K100; NUC\* K110/K111; NUC\* K117; NUC\* K118; NUC\* K250; NUC\* K260/K261. Corequisites: NUC\* K210/K211; NUC\* K221.

A study of the primary and secondary systems of a Pressurized Water Reactor (PWR), with emphasis on control and protective subsystems, plant start-up, normal plant operation, and critical shut-down procedures. Reactor "accident" analyses are stressed for total reactor system comprehension. This is the capstone event for the nuclear degree program.

## NUC\* K221 (formerly NUC K2111) 1 CREDIT HOUR

NUCLEAR SIMULATOR LAB Prerequisites: NUC\* K100; NUC\* K110/K111; NUC\* K117; NUC\* K118; NUC\* K250; NUC\* K260/K261.

Corequisites: NUC\* K210/K211; NUC\* K220. A study of reactor plant primary and secondary systems, control and protective systems, plant start- up, normal plan operation, and critical shut-down procedures is covered through the extensive "handson" utilization of a modern nuclear reactor simulator. This is the capstone event for the nuclear degree program.

#### NUC\* K230 (formerly NUC K2116) 2 CREDIT HOURS NUCLEAR TOPICS

Prerequisites: NUC\* K100; NUC\* K110/K111; NUC\* K117; NUC\* K118; NUC\* K250; NUC\* K260/K261.

This course is a state-of-the-art survey course studying factors impacting modern nuclear power generation, including environmental impacts, fuel management, preventive maintenance, equipment operation, failure and analysis, safety engineering, human factors engineering, and emergency planning procedures. Additionally, an overview of other regional nuclear related business activities will be presented.

#### NUC\* K240 (formerly NUC K2117) 3 CREDIT HOURS ADVANCED NUCLEAR CHEMISTRY

Prerequisites: CHE\* K121; MAT\* K254; NUC\* K100; NUC\* K110/111; NUC\* K117; NUC\* K250.

This course is a specific nuclear elective to comprehensively study concepts associated with nuclear reactor chemistry. The sophisticated analysis of chemistry principles on the safe and economical



operation of commercial nuclear reactors will be the emphasis of this elective course.

#### NUC\* K250 (formerly NUC K2118) 4 CREDIT HOURS REACTOR THEORY

Prerequisites: MAT\* K254; NUC\* K110/K111; NUC\* K117; NUC\* K118; PHY\* K114; PHY\* K115.

*Corequisites: MAT\* K256; NUC\* K260/K261.* This course studies nuclear energy with emphasis on fission, reactor types, moderation of neutrons, activation and decay schemes, transmutations, neutron diffusion theory, and theoretical reactor operation including heat transfer, power transients, instrumentation and resultant radiation.

#### NUC\* K260 (formerly NUC K2122) 2 CREDIT HOURS NUCLEAR MATERIALS SCIENCE

Prerequisites: MAT\* K254; NUC\* K100; NUC\* K110/K111; NUC\* K117; NUC\* K118. Corequisites: MAT\* K256; NUC\* K250; NUC\* K261.

This course will acquaint the student with constitution, properties and characteristics of engineering materials and provide a foundation for stress analysis on structures in equilibrium with emphasis on applications to nuclear power, including effects of material irradiation.

#### NUC\* K261 (formerly NUC K2123) 1 CREDIT HOUR

#### NUCLEAR MATERIALS SCIENCE LAB

Prerequisites: MAT\* K254; NUC\* K100; NUC\* K110/K111; NUC\* K117; NUC\* K118. Corequisites: MAT\* K256; NUC\* K250; NUC\* K260.

This lab will focus on performing experiments in metallographic examination, mechanical testing, and heat treatment of a variety of ferrous and nonferrous metals. Experiments to determine properties of materials such as strain, fatigue, corrosion, compression and tensions will also be conducted. Brittle fracture and thermal stress will be performed as well as effects of irradiating materials.

#### NUC\* K270 (formerly NUC K2200) 3 CREDIT HOURS NUCLEAR HEALTH PHYSICS

Prerequisites: MAT\* K186; NUC\* K110/K111. This course is offered to provide the nuclear/environmental technology student as well as the general student with a working knowledge of radiation and its interaction with matter. Topics will include types of biological effects of radiation, radiation standards, and regulations, instrumentation, shielding, dosimeter, and practices and principles of radiation protection.

#### NUC\* K295 (formerly NUC K2995) 3 CREDIT HOURS NUCLEAR CO-OP

Prerequisite: Permission of the program coordinator.

Corequisite: Students must have completed all freshman level technology courses and have a GPA of 2.50 or better. In this course, students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/ laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester internship.

#### NUC\* K296 3 CREDIT HOURS NUCLEAR CO-OP II

Prerequisites: Consent of Program Coordinator. Students must have completed all freshman level technology courses, a summer internship and NUC\* K295. In this course, students will work in industry gaining enhanced hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education along with hands-on experience gained in their 12-week summer internship, as well as from initial nuclear co-op experience. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester.

# NURSING

#### NUR\* K101 8 CREDIT HOURS INTRODUCTION TO NURSING PRACTICE Prerequisites: BIO\* K211; BIO\* K212; ENG\*

*K101 or ENG\* K101S. Corequisites: BIO\* K235 and PSY\* K111.* The student will focus on concepts basic

to nursing practice. Emphasis is placed on application of the nursing process, communication skills, and nursing practice procedure acquisition. Clinical and laboratory experiences offer opportunities to integrate theoretical principles and demonstrate caring and competence in beginning professional role development. Theory: 60 hours Clinical: 180 hours.

## NUR\* K102 8 CREDIT HOURS FAMILY HEALTH NURSING

Prerequisites: NUR\* K101; BIO\* K235; ENG\* K101 or ENG\* K101S; PSY\* K111. Coreauisites: NUR\* K103: PSY\* K201: SOC\* K101. The student will focus on issues affecting the family, including childbearing, childrearing, geriatric care and intermediate health care needs of limited duration. The medical surgical health problems include care for the client in the peri-operative period and the client experiencing orthopedic and simple genito-urinary conditions. The course addresses several psychiatric disorders: anxiety and cognitive disorders, common child and adolescent psychiatric disorders. The student will have clinical rotations that provide experience caring for the childbearing family as well as caring for medical-surgical clients across the lifespan. Theory: 60 hours Clinical: 180 hours.

#### NUR\* K103 1 CREDIT HOUR PHARMACOLOGY FOR FAMILIES ACROSS THE LIFESPAN

Prerequisites: NUR\* K101; BIO\* K235; PSY\* K111.

Corequisites: NUR\* K102; PSY\* K201; SOC\* K101.

The student will focus on the safe use, pharmacological principles, indications and nursing implications related to drug therapy when caring for individuals and families. Emphasis will be placed on medications used with perinatal, neonatal, pediatric, geriatric and peri-operative clients. The course will stress the general characteristics of selected medications and will include indications, pharmacokinetics, side effects, adverse effects, contraindications, administration, nursing implications across the lifespan, client education and relationship to prior learning. Theory: 15 hours.

## NUR\* K108 (formerly NRS K108) 3 CREDIT HOURS

# PERSPECTIVES OF NURSING

Prerequisite: ENG\* K096 placement. This course will enable students to assess their potential to complete the nursing curriculum as well as give students an introduction to nursing roles, skills and responsibilities. Emphasis will be on defining the role of the nurse and exploring baseline skills such as problem solving, interpersonal relations, mathematical calculations and basic medical terminology. Site visits will be included in the course to observe various health care settings and the role of the nurse within those settings. Perspectives courses are most appropriate for degree students enrolled

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in any of the career programs, including Liberal Arts or General Studies students. This course is not open to students who have completed any nursing course. This course satisfies the College's First-Year Experience requirement.

#### NUR\* K130 1 CREDIT HOUR LPN to RN TRANSITION I

Prerequisite: Charter Oak State College NUR 190: LPN to RN Articulation Bridge Course. This course is the final component of the CT League of Nursing LPN to RN Articulation plan for the CT Community Colleges Nursing Program (CT-CCNP) which prepares LPNs to enter into the CT-CCNP in the second year of study. Students enrolling in this course have been accepted for admission into the CT-CCNP and have chosen the option to enter the third semester. This course builds upon the content of Charter Oak State College NUR 190: LPN to RN Articulation Bridge Course by providing and integrating content that is specific to the CT-CCNP curriculum. Upon successful completion of Charter Oak State College Nursing 190, this course and the CT-CCNP prerequisites and concurrent general education courses up to the second year of study, articulation credits are awarded per the escrow model and the LPN advances to NUR\* K201 and NUR\* K202. Clinical: 45 hours (Clinical and laboratory distribution is at the discretion of the college attended).

#### NUR\* K131 1 CREDIT HOUR LPN to RN Transition II

Prerequisites: Charter Oak State College NUR 190; NUR\* K130; BIO\* K235; PSY\* K111; PSY\* K201; SOC\* K101.

This course represents a mechanism to award credit equivalent to the first year of CT-CCNP to the LPN who has successfully completed the CT League for Nursing Articulation Plan for LPN to RN.

#### NUR\* K201 9 CREDIT HOURS NURSING CARE OF INDIVIDUALS AND FAMILIES I

Prerequisites: NUR\* K102; NUR\* K103 (or for LPN Articulation NUR\* K131); PSY\* K201; SOC\* K101; BIO\* K211; BIO\* K212; ENG\* K101 or ENG\* K101S.

Corequisites: NUR\* K202 and ENG\* K102. The student will focus on holistic care of individuals and families across the lifespan with a variety of health care needs. The needs of clients experiencing endocrine, respiratory, gastrointestinal, cardiovascular conditions and selected mental health disorders are examined. Bioterrorism as a health care issue will be addressed. Clinical laboratory experience provides the student an opportunity to administer care to a diverse population of clients in a variety of acute care and community health care settings. The student will utilize critical thinking, caring, professionalism and communication skills in the care of the client. Emphasis is placed on provision of safe and competent care and development of the professional role as a member of a multidisciplinary health care team. Over the semester, the student is increasingly challenged with more complex client assignm ents in the clinical area. Theory: 60 hours Clinical: 225 hours.

#### NUR\* K202 1 CREDIT HOUR PHARMACOLOGY FOR INDIVIDUALS AND FAMILIES WITH INTERMEDIATE HEALTH CARE NEEDS

Prerequisites: NUR\* K102; NUR\* K103 (or for LPN Articulation NUR\* K131; PSY\* K201; SOC\* K101; BIO\* K211; BIO\* K212; ENG\* K101 or ENG\* K101S.

Corequisites: NUR\* K201 and ENG\* K102. The student will focus on pharmacologic principles related to the care of individuals and families across the lifespan with intermediate health care needs. Emphasis will be placed on medications used for clients who have endocrine, gastrointestinal, respiratory, cardiovascular, autoimmune, and psychiatric conditions and clients who are survivors of bioterrorism. Theory: 15 hours.

#### NUR\* K203 8 CREDIT HOURS NURSING CARE OF INDIVIDUALS AND FAMILIES II

Prerequisites: NUR\* K201; NUR\* K202; ENG\* K102.

Corequisites: NUR\* K204; NUR\* K205; and a Humanities or Fine Arts elective. The student will focus on the holistic care of individuals, families, and groups with complex health care needs. The student will incorporate critical thinking, caring behaviors, professionalism, and communication skills when providing nursing care in a variety of acute, long-term and/ or community settings. The student will have an opportunity to manage a multi client assignment with an emphasis on safe and competent practice. An observational experience with a visiting nurse agency, a dialysis unit and/or a cancer center will be provided. Theory: 45 hours Clinical: 225 hours.

#### NUR\* K204 1 CREDIT HOUR PHARMACOLOGY FOR INDIVIDUALS, FAMILIES AND GROUPS WITH COM-PLEX HEALTH CARE NEEDS

Prerequisites: NUR\* K201; NUR\* K202; ENG\* K102.

Corequisites: NUR\* K203; NUR\* K205; and a Humanities or Fine Arts elective. The student will focus on safe use, pharmacologic principles, indications and nursing implications related to drug therapy in the care of individuals, families, and groups with complex health care needs. Emphasis will be placed on medications used for clients who have acute and chronic renal failure, oncology and neurological conditions, and multi-system dysfunction and clients who choose an alternative therapy. Theory: 15 hours.

## NUR\* K205 2 CREDIT HOURS NURSING MANAGEMENT AND TRENDS

Prerequisites: NUR\* K201; NUR\* K202; ENG\* K102.

Corequisites: NUR\* K203; NUR\* K204; and a Humanities or Fine Arts elective. The student will explore the basic principles of management, leadership and collaborative relationships as they relate to providing safe and competent care. The focus is on the utilization of critical thinking skills to make decisions, priority setting, delegation, legal parameters of nursing practice and ethical issues. The student will expand the concept of caring to the profession of nursing through collegial and interdisciplinary communication. The course facilitates the transition of the student into the profession and his/ her role in contemporary nursing practice. Theory: 30 hours.

# **PHYSICAL SCIENCE**

#### OCE\* K101 (formerly PSC K107) 3 CREDIT HOURS OCEANOGRAPHY

Corequisite: ENG\* K096 or higher. Please note: if completing ENG\* K096 prior to enrolling in OCE\* K101, a grade of "C#" or better is required for registration into this course.

This course covers the following topics: properties of sea water, marine ecology, waves, tides, currents, meteorology, ocean circulation, origin of the Long Island Sound, chemical oceanographic processes, life in the sea, and environmental modification and control.

# PHILOSOPHY

#### PHL\* K101 (formerly PHL K111) 3 CREDIT HOURS INTRODUCTION TO PHILOSOPHY

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better. This course is an introduction to the content and process of epistemology, metaphysics, and ethics is presented. The course will portray philosophizing as an active and dynamic life experience aimed at the creation of a world view. The course is designed to represent philosophy as an integrated experience of mind, body, feeling, and intuition.

#### PHL\* K111 (formerly PHL K215) 3 CREDIT HOURS ETHICS

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\*K096 with a "C#" grade or better.

This course will cover the fundamentals of ethics, including an introduction to the origins and nature of moral right and responsibility. Students will analyze and formulate positions on contemporary ethical issues.

## PHL\* K112 3 CREDIT HOURS MEDICAL ETHICS

Prerequisites: ENG\* K101 or ENG\* K10 1S placement $\infty$  or completion of ENG\*K096 with a "C#" grade or better.

Medical, biological, and genetic technologies are advancing at an astounding rate. At the same time, the web of relationships that connect individuals, medical providers, and medical resources has grown more complex and increasingly embedded in wider social, political and global issues. Specific areas to be examined include, but are not limited to, the doctorpatient relationship, medical research on humans and animals, medical technology (genetic engineering; cloning; stem cells), reproductive rights, and access to medical resources.

#### PHL\* K131 3 CREDIT HOURS LOGIC

Prerequisites: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.  $\infty$  or MAT\* K137 or MAT\* K137S with a "C" grade or better. Logic is the study of rules for sound reasoning.

This course focuses on developing skill in evaluating argumentation in various forms. Topics covered in the course include argument recognition, fallacy identification, deductive and inductive reasoning, and basic symbolic logic.

#### PHL\* K151 (formerly PHL K116) 3 CREDIT HOURS WORLD RELIGIONS

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course will begin by providing students with a philosophical framework that will be used to understand the world's major religious traditions. What is religion? How do each of the traditions considered illustrate the workings of myth, practice, experience, and community and how do all of these elements come together in the construction of a worldview particular to each? We will focus on Indigenous religious traditions, Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, and Islam. We may also examine other religious expressions including emerging visions. Many topics will be interwoven into our studies including theistic, non-theistic, mystical, and devotional approaches, theological problems such as theodicy, as well as many social and ethical issues of current concern, particularly the role of women in traditional and emerging expressions. Course fulfills International/Intercultural Requirement.

#### PHL\* K225 3 CREDIT HOURS SCIENCE, RELIGION, AND THE HUMAN EXPERIENCE

Prerequisites: Completion of any 100-level philosophy course or permission of instructor. Historically, the cultural forces of scientific inquiry and religious tradition have been at odds over explanations of the world and how humans interact with it. This has become increasingly evident in the 21st century as interactions between social, political and religious agendas have become more strained. This course will examine the complex dynamic between the scientific worldview and religious alternatives. Can they be reconciled? Should they be? Specific areas to be studied include, but are not limited to, the nature of scientific and religious dialogue, the role of religion and spirituality, empirical studies of religious practices and the development of secular ethics.

# PHOTONICS ENGINEERING TECHNOLOGY

PHO\* K101 (formerly PHO K101) 4 CREDIT HOURS INTRO TO LIGHT AND LASERS

Corequisite: MAT\* K095 OR MAT\* K095I. Optics is the science underlying technologies such as laser manufacturing, 3-D holograms, arthroscopic surgery, CD and DVD technology, fiber optic telecommunications and high efficiency LED lighting. In this course we will explore the nature, production and behavior of light while learning about light sources and applications in technology and nature. Hands-on activities, problem based learning projects and demonstrations are used to illustrate concepts. (The online courses use "home labs" for this purpose.) Algebra and some trigonometry will be used. This course is equivalent to PHY\* K103 Introduction to Lasers. One 3 hour lecture; one 2 hour lab.

### PHO\* K102 4 CREDIT HOURS APPLIED OPTICS

Prerequisites: PHO\* K101. Building on the foundation of PHO\* K101, this course will introduce more sophisticated optical systems and mathematical analysis. Topics will include thick lenses, matrix methods of optics, aberrations, stops and pupils, interferometry, Fresnel and Fraunhofer diffraction and polarization. Emphasis will be on applications of optics in modern technology. All laboratory section will reinforce concepts through hands-on experiments and team projects. This course is equivalent to PHY\* K141 Applied Optics.

#### PHO\* K140 4 CREDIT HOURS OPTOELECTRONICS

Prerequisites: EET\* K105/106 and PHO\* K101. This course introduces semiconductor technology and devices, with an emphasis on optoelectronic devices, including LEDs, laser diodes, and photodiodes. Analysis and design of circuits containing these devices will be covered, as will current applications. The course includes a lab component.

## PHO\* K230 (formerly PHO K230) 4 CREDIT HOURS

#### LASER ELECTRONICS

Prerequisites: EET\* K134/135 or PHO\* K140; TCN\* K105; or permission of instructor. This course will focus on the design and analysis of electronic circuits and devices of particular interest to the field of photonics, including LEDs, LDs, and their driver circuitry; optical receivers, laser and flash lamp power supplies; displays; optisolators; optical sensors; solar cells; direct and external modulators. The lab portion of the course includes experiments and simulations to parallel the lecture.

#### PHO\* K241 3 CREDIT HOURS INTRODUCTION TO LASER TECHNOLOGY

Prerequisites: PHO\* K101. Corequisite: PHO\* K241.

This course provides an introduction to the physics of lasers, laser output characteristics, and types of lasers. Application of lasers will be explored through online and print journals and field trips to local companies that build, integrate or use lasers.

#### PHO\* K242 1 CREDIT HOURS INTRODUCTION TO LASER TECHNOLOGY LAB

Prerequisites: PHO\* K101 or permission of instructor. Corequisites: PHO\* K241 and TCN\* K105.

This lab course will reinforce classroom physics and technology concepts and give students the opportunity to become familiar with common laser instrumentation. Lab projects will allow students to more deeply explore topics of interest.

#### PHO\* K251 3 CREDIT HOURS FIBER OPTIC SYSTEMS AND DEVICES

Prerequisites: PHO\* K101. Corequisites: PHO\* K252.

This course will introduce parameters describing optical fibers, fiber optic system components, waveguide transmission as well as non-telecommunications uses of fiber. Fiber coupling, splicing, and testing will also be covered. Concepts from optics and electronics will be used extensively to explain the operation of fiber systems and devices.

#### PHO\* K252 1 CREDIT HOURS FIBER OPTIC SYSTEMS AND DEVICES LAB

Prerequisites: PHO\* K101. Corequisite: PHO\* K251 This laboratory course accompanies PHO\* K251 and provides practical experience applying and testing fiber optic connectors and splices, fusion splicing, and using instrumentation such as optical loss test sets and the optical time domain reflectometer (OTDR). Students will measure fiber optic parameters and work active and passive devices commonly found in fiber optic systems.

#### PHO\* K295 (formerly PHO K2995) 3 CREDIT HOURS PHOTONICS CO-OP

Prerequisite: Permission of the program coordinator.

In this course, students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by each co-op student during the semester internship.

# PHYSICS

#### PHY\* K100 (formerly PHY K100) 1 CREDIT HOUR ESSENTIAL TOPICS FOR PHYSICS

This course covers basic physics topics essential for the success of students in engineering technology programs, including: scientific notation, measurement and the SI (metric) system, right angle trig, vector addition and the concepts of velocity, acceleration, force, work, energy and power. The course is designed for students who have never studied physics and do not have PHO\* K101 in their program of studies, or students who have received credit for PHO\* 101 and need a refresher in these topics.

#### PHY\* K103 (formerly PHY K103) 4 CREDIT HOURS INTRODUCTION TO LIGHT AND LASERS

Corequisite: MAT\* K095 OR MAT\* K095I. Optics is the science underlying technologies such as laser manufacturing, 3-D holograms, arthroscopic surgery, CD and DVD technology, fiber optic telecommunications and high efficiency LED Lighting. In this course we will explore the nature, production and behavior of light while learning about light sources and application in technology and nature. Hands-on activities, problem-based learning projects and demonstrations are used to illustrate concepts. (The online courses use "home labs" for this purpose.) Algebra and some trigonometry will be used. This course is equivalent to PHO\* K101 Introduction to Light and Lasers. One 3 hour lecture; one 2 hour lab.

## PHY\* K110 (formerly PHY K105) 4 CREDIT HOURS INTRODUCTORY PHYSICS

*Prerequisite: MAT\* K095 or MAT\* K095l or equivalent.* 

This course is a one semester exploration of the basic principles of classical physics. Topics will include classical mechanics, electricity, vibrations and waves. Students will have the opportunity to discover and explore the laws of physics using stateof-the-art instrumentation. Three-hour lecture; one two-hour laboratory.

#### PHY\* K114 (formerly PHY K110) 4 CREDIT HOURS MECHANICS

Prerequisite: MAT\* K137 or MAT\* K137S with a "C" grade or better.

*Corequisite: MAT\* K172.* This course deals with the fundamental principles of classical mechanics using techniques of algebra and trigonometry. Topics covered include vectors, kinematics, translational and rotational equilibrium, Newton's laws of motion, gravitation, work, power, energy, impulse, momentum, and rotary motion. Three-hour lecture; one two-hour laboratory.

#### PHY\* K115 (formerly PHY K120) 4 CREDIT HOURS HEAT SOUND LIGHT

Prerequisite: MAT\* K137 or MAT\* K137S with a "C" grade or better. Corequisite: MAT\* K172. Please note if MAT\* K172 is completed prior to registration into PHY\* K115, students must complete MAT\* K172 with a "C" grade or better.

This course covers three broad areas of physics including thermal equilibrium, heat transfer, harmonic motion and wave properties of sound and light. Three-hour lecture; one two-hour laboratory.

#### PHY\* K116 (formerly PHY K130) 4 CREDIT HOURS MODERN PHYSICS

Prerequisites: MAT\* K095 OR MAT\* K0951 and high school Physics or equivalent. This course gives an introduction to the physics of the twentieth century. Topics include special relativity, quantum physics, atomic physics and nuclear physics, as well as an overview of electricity and magnetism. Many classic experiments of Modern Physics, such as Frank-Hertz and the photoelectric effect, will be performed. Three-hour lecture; one two-hour laboratory.



## PHY\* K121 (formerly PHY K151) 4 CREDIT HOURS GENERAL PHYSICS I

Prerequisite: MAT\* K186. A prior physics (PHY\* K114 or high school physics) strongly recommended. This course will cover the fundamental principles of classical mechanics, properties of matter, heat, harmonic motion, waves, and sound.

#### PHY\* K122 (formerly PHY K152) 4 CREDIT HOURS GENERAL PHYSICS II

Prerequisites: MAT\* K186 and PHY\* K121. This course will cover the fundamental principles of electricity and magnetism, AC & DC circuits, electromagnetic fields and waves, optics, relativity and quantum and atomic physics.

## PHY\* K221 4 CREDIT HOURS CALCULUS-BASED PHYSICS I

Prerequisite: MAT\* K254 highly recommended.

Corequisite: MAT\* K254.

This is a calculus-based introduction to the basic concepts of classical mechanics. Major topics will include Newton's laws, motion in n-dimensions, periodic motion, thermodynamics, energy, hydrodynamics, and an introduction to material science. The course will emphasize the theoretical aspects of physics and will help the student develop effective problem solving strategies. Laboratories will be designed to allow the student to visualize the important concepts introduced in lecture and to increase student understanding of the scientific process. There will be two hours of lecture, one hour of problem solving, and three hours of lab each week.

#### PHY\* K222 4 CREDIT HOURS CALCULUS-BASED PHYSICS II Prerequisite: PHY\* K221.

This is a continuation of PHY\* K221. Major topics will include continuation of the study of solids, electromagnetic phenomena, Maxwell's equations, and atomic and sub-atomic phenomena. Laboratories will center around studying electromagnetic phenomena and enhancing student knowledge of the relationship between electricity, magnetism and light. There will be two hours of lecture, one hour of problem solving, and three hours of lab each week.

# **POLITICAL SCIENCE**

#### POL\* K103 (formerly POL K213) 3 CREDIT HOURS INTRODUCTION TO INTERNATIONAL RELATIONS

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course is a survey of the factors which influence the policies of modern nation states. Concepts in world politics, such as balance of power, imperialism, diplomacy, international law, and international organizations will be analyzed. The causes of international tensions with emphasis on contemporary conflict situations will also be considered. Course fulfills International/Intercultural Requirement.

#### POL\* K111 (formerly POL K111) 3 CREDIT HOURS AMERICAN GOVERNMENT

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. Through open discussion of political issues and controversies, this course examines the framework of our democracy. The broad study focuses on the strengths and weaknesses of American pational govern-

broad study focuses on the strengths and weaknesses of American national government. Topics such as election campaigns, political parties, presidential power, and individual liberties are explored.

## POL\* K112 3 CREDIT HOURS STATE AND LOCAL GOVERNMENT

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course will examine the forms, functions, processes and challenges of state and local government in the United States. Emphasis will be placed on the efforts of state and local governments to cope with the contemporary social, economic, and political problems. Particular attention will be given to the history and structure of state and municipal government in Connecticut, including the legislative process of the Connecticut General Assembly.

### POL\* K200 3 CREDIT HOURS ISSUES IN CONTEMPORARY AMERICAN POLITICS

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better, and completion of any 100-level Social Science course. This course will explore all sides of the various issues that are currently being discussed by politicians and the electorate in America. These issues may include immigration policies, anti- poverty programs, gay and lesbian rights, legalization of marijuana, campaign finance reform, America's health care system, the USA Patriot Act, stem cell research, global warming, US military intervention abroad, abortion, gun control, crime. Since this is a seminar class, students will be expected to prepare multimedia presentations and participate in political debates to encourage independent thinking, critical analysis, and scholarly discussions.

#### POL\* K212 3 CREDIT HOURS CONSTITUTIONAL LAW AND CIVIL RIGHTS

Prerequisites: ENG\* K101 or ENG\* K1015 placement∞ or completion of ENG\* K096 with a "C#" grade or better. An intensive study and analysis of the United States Constitution and especially the Amendments to that Constitution; a study and review of court decisions which interpret the Constitution; a comprehensive study of court decisions which determine police policy and consideration of specific guidelines which must be followed in the criminal justice process.

## POL\* K289 (formerly POL K298) 3 CREDIT HOURS

## **TEACHING ASSISTANTSHIP IN POLITICS**

Prerequisite: At least two prior courses in politics, and permission of the instructor. In this assistantship, students will assist a faculty member in conducting an academic course offered in the field of politics. Students may lead discussion groups, work with individual students, organize field trips, make presentations, and/or other work to be arranged.

#### POL\* K295 1 - 12 CREDITS HOURS CONNECTICUT LEGISLATIVE INTERNSHIP

Prerequisite: Permission of the instructor. This course is an active learning experience for the student as intern in the state legislature. A student must apply to be an intern by contacting Three Rivers Community College's faculty representative to the Legislative Intern program. In the classroom, students will learn about the General Assembly's lawmaking processes and skills that will help them to assist their appointed state legislator in servicing his/ her constituents. There will be an orientation in January prior to the start of this internship.

# **PSYCHOLOGY**

#### PSY\* K104 (formerly PSY K104) **3 CREDIT HOURS PSYCHOLOGY OF ADJUSTMENT**

This course is a theoretical and experiential exploration and understanding of the self-encountering the self and the self-encountering the other. The course is designed to facilitate students' progress beyond "insight" to initiating constructive change where so desired. Topics include: the healthy personality, the body, emotion, self-disclosure, social roles, love, work, play, religion and self, communication patterns, families and healthy personality, and loss and death.

#### PSY\* K111 (formerly PSY K111) **3 CREDIT HOURS GENERAL PSYCHOLOGY I**

Corequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.

This introductory course provides an overview of the theories and research findings pertaining to scientific psychology with an emphasis on: the origins of psychology, nature and nurture, human diversity, theoretical models, research methodology, biological bases of thought and behavior, learning theory, sensation and perception, memory, stress and health as well as emotion and motivation.

#### PSY\* K112 (formerly PSY K112) **3 CREDIT HOURS GENERAL PSYCHOLOGY II**

Corequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better.

This introductory course provides an overview of the applied and social aspects of scientific psychology with an emphasis on consciousness and cognition, human development, personality, theory and assessment, psychological disorders and therapy, social psychology and thinking, language and intelligence.

#### PSY\* K200 (formerly PSY K215) **3 CREDIT HOURS** CHILD PSYCHOLOGY

#### Prerequisite: PSY\* K111.

This course presents the basic principles, current research and traditional theories of child development, from the prenatal period to the onset of adolescence, with an emphasis on the earlier years of childhood. Students will be guided in the development of a scientific and objective attitude toward the interpretation of child behavior and will study various methods of conducting research in child development. They will observe children and

analyze their behavior in each of the following areas: physical abilities and motor skills, cognitive abilities as well as social and emotional developments.

#### PSY\* K201 (formerly PSY K201) **3 CREDIT HOURS** LIFE SPAN DEVELOPMENT

# Prerequisite: PSY\* K111.

This course will study the physical, psychosocial and cognitive development of humans from birth to death. There will be an emphasis on distinct time periods such as conception and development of the fetus, infancy, childhood, puberty and adolescence, young, middle, and late adulthood, and gerontology.

## **PSY\* K204 3 CREDIT HOURS CHILD AND ADOLESCENT** DEVELOPMENT

Prerequisite: PSY\* K111. This course will examine childhood from conception through adolescence, with emphasis on the areas of emotional, social(personality), cognitive, language and physical development.

## **PSY\* K220 3 CREDIT HOURS EDUCATIONAL PSYCHOLOGY**

Prerequisite: PSY\* K111 or PSY\* K112. Educational psychology encompasses learning, human development, motivation, and assessment. The major areas of emphasis for this course include evaluation of individual differences, theories of learning, developmental psychology's impact on education, effective teaching strategies, peer- reviewed educational research, behavior management and discipline, as well as tests and measurements. The course provides an overview of teaching, learning and classroom dynamics.

#### PSY\* K240 (formerly PSY K241) **3 CREDIT HOURS** SOCIAL PSYCHOLOGY

Prerequisite: PSY\* K111 or PSY\* K112. This course presents an in-depth and extensive psychological study of social behavior. The major thrust of this course will focus upon attitude formation, language and communication, group interaction, leadership roles, and cultural forces. These factors will be examined as they affect individuals in contemporary society.

#### PSY\* K243 (formerly PSY K243) **3 CREDIT HOURS** THEORIES OF PERSONALITY

Prerequisite: PSY\* K111 or PSY\* K112. This course will study the major theories of personality, with emphasis on psychoanalytic theory, and descendants, learning theory, and phenomenological theories. Models in literature will be examined in the context of the major theories of personality.

#### **PSY\* K244 3 CREDIT HOURS S** PORT PSYCHOLOGY

Prerequisite: PSY\* K111 or PSY\* K112. A comprehensive study of the psychological concepts related to fitness and sports behavior. The course covers the history and evolution of this emerging field of study and practice. The course includes elements of experimental psychology such as motivation, cognition, and learning which are also apparent in sports psychology. Additional topics include personal goal-setting, competitive anxiety, personality characteristic of athletes, psychology of coaching, team cohesion, and the effects of sports on spectators.

#### PSY\* K245 (formerly PSY K245) **3 CREDIT HOURS ABNORMAL PSYCHOLOGY**

Prerequisite: PSY\* K111 or PSY\* K112. This course offers an introduction to psychopathology and psychotherapy. A study of emotional disturbance includes: neuroses and personality disorders, psychoses, psycho diagnosis, and psychotherapy with an emphasis on how disorders begin and various treatments that are used. Topics in the course are: the nature of neurosis, anxiety reactions, obsessive-compulsive reactions, depressive reactions, hysteria and psychophysiological reactions, personality disturbance, sexual deviance, addictions, theories of psychosis, forms of psychosis, somatic therapies, psychoanalytic therapies, behavior therapy, client-centered therapy, and group therapies.

#### PSY\* K247 (formerly PSY K247) **3 CREDIT HOURS INDUSTRIAL & ORGANIZATIONAL PSYCHOLOGY**

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better, or permission of the instructor.

This course provides an examination of the structure and property of organizations with emphasis on business and industrial organizational functioning. Psychological factors include: motivation,





leadership, group processes, incentives, and conflict resolution. This course is equivalent to BMG\* K210 - Organizational Behavior.

#### PSY\* K296 (formerly PSY K298) 3 CREDIT HOURS TEACHING ASSISTANTSHIP IN PSYCHOLOGY

Prerequisites: At least two prior courses in psychology and permission of the instructor. In this assistantship, students will assist a faculty member in conducting an academic course offered in the field of psychology. Students may lead discussion groups, work with individual students, organize field trips, make presentations, and/or other work to be arranged.

## RECREATION AND LEISURE SERVICES

#### RLS\* K101 3 CREDIT HOURS INTRODUCTION TO RECREATION AND LEISURE SERVICES

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course surveys the organization and operation of recreational programs offered by community agencies, recreation service centers, industry, hospitals, camps and municipal and state recreation departments. Field experience to acquaint students with the nature and diversity of programs and services are included.

#### RLS\* K218 3 CREDIT HOURS ORGANIZATION AND ADMINISTRATION OF SPORT AND LEISURE

Pre-requisite: RLS\* K101.

This course will focus on the many administrative roles that an Athletic Director/ Manager assumes when developing, maintaining or improving sports programs. Topics will include facility design, staffing, equipment, operating practices, risk management, programming, budgeting and insurance.

#### RLS\* K294 3 CREDIT HOURS SPORT AND LEISURE MANAGEMENT PRACTICUM

Pre-requisite: Completion of 30 credits with a GPA of at least 2.5; completion RLS\* K101 with a grade of "C"; ENG\* K101 or ENG\* K101S; and two 200-level Sports and Leisure Management courses; or permission of instructor.

This practicum is designed to give the student an opportunity to implement the

skills an knowledge gathered through their Sports and Leisure Management course work. This real world experience will enable the student grow their knowledge, increase their professional development and gain valuable work experience.

# SCIENCE

#### SCI\* K250 (formerly SCI K250) 4 CREDIT HOURS INTEGRATED SCIENCE

Prerequisites: Completion of ENG\* K101 or ENG\* K101S with a "C" grade or better, and completion of MAT\* K095 OR MAT\* K095I with a "C#" grade or better or a higher level math course.

This course stresses the processes common to all earth sciences and organisms. Topics include scientific method, chemical principles, physical principles, biological principles and methods of discovery. Upon completion of this course, the student will be able to recognize terminology, specific facts, and general principles associated with the natural sciences. The student will develop basic science concepts, knowledge and skills, and the ability to carry out their own scientific inquiries. The content will be drawn from a wide range of scientific topics. This course is open to all non-science majors. This course does not meet the pre-admission requirement for the Nursing Program. Three hour lecture; one three hour laboratory.

# SOCIOLOGY

#### SOC\* K101 (formerly SOC K111) 3 CREDIT HOURS PRINCIPLES OF SOCIOLOGY

Corequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is a study of the major concepts used in the field of sociology. The nature of institutions will be examined both individually and in their dynamic interrelationship. Emphasis is placed on understanding the impact of society on our lives, and on increasing our effectiveness in controlling our destinies within it.

#### SOC\* K103 (formerly SOC K112) 3 CREDIT HOURS SOCIAL PROBLEMS

Corequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course is designed to increase the understanding of the nature, scope, history, causes and complexity of contemporary social problems. The course emphasizes not only the problems but also proposed strategies for solution. Topics are studied in the context of many societies around the world, including those of Europe, Asia, Africa, and Latin America, in order to provide the student with a global and multicultural perspective on the issues. Topics vary from semester to semester according to current concerns and interests. Topics often included are poverty, crime, violence, substance abuse, racism, family issues, sexism, health care, environmental destruction, cities, and population. Course fulfills International/ Intercultural Requirement.

## SOC\* K210 (formerly SOC K213) 3 CREDIT HOURS

#### SOCIOLOGY OF THE FAMILY

Prerequisite: Any 100-level anthropology, economics, history, political science, psychology, or sociology course; or permission of the instructor.

This course examines the history, structure, functions, and varieties of modern American families. Changing definitions of marriage, sexual expression, child rearing, sex roles, and divorce rates will be examined from a sociological perspective. Emphasis is less on personal adjustment in marriage and more on sociological explanations for why current trends are occurring and what implications they hold for the individual, family, and society.

#### SOC\* K211 (formerly SOC K218) 3 CREDIT HOURS SOCIOLOGY OF GENDER

Prerequisite: Any 100-level anthropology, economics, history, political science, psychology, or sociology course; or permission of the instructor.

This course is designed for anyone interested in a better understanding of what it means to be male or female in societies, past and present, in the U.S. and around the world. Some topics to be explored include the transformation of gender roles; women's rights in education and at the workplace; the problems of rape and domestic violence; gender in politics, the military, and religion; the impact of gender on intimate relationships such as love, sexuality, friendship, marriage and family; the nature of sexual orientation and the problem of homophobia; and the global struggle for human rights of women and gays. Interrelationships of gender, sexual orientation, social class, race and ethnicity will be studied as an integral aspect of the course. The class format varies - lecture, discussion, films, and speakers.

### SOC\* K213 3 CREDIT HOURS HUMAN SEXUALITY

Prerequisite: Any 100-level anthropology, psychology or sociology course. This course explores the social aspects of sexualities as they exist across different social groups. Students will analyze the Western hegemonic ideal of "sexuality" and expand their understanding of the many influences on patterns of sexual behavior. This includes a close examination of sexualities in relation to ethnic and racial boundaries and evolutionary, historical and cross-cultural perspectives.

#### SOC\* K220 (formerly SOC K216) 3 CREDIT HOURS RACIAL & ETHNIC DIVERSITY

Prerequisite: Any 100-level anthropology, economics, history, political science, psychology, or sociology course; or permission of the instructor.

This course studies the relationships between racial and ethnic groups in diverse, multi-ethnic societies. It emphasizes the historical and social causes of prejudice and discrimination and their impact on the life experiences of the members of both dominant and subordinate groups in society. It also focuses on social movements to bring about racial/ethnic equality. The course also examines the issues in the context of many societies, including societies in Africa, Europe, South America, and the Middle East to provide the student with a broad-based understanding. Format of the course includes lectures, videos, speakers, and discussion. Course fulfills International/Intercultural Requirement.

#### SOC\* K230 3 CREDIT HOURS THE CITY

Prerequisite: Any 100-level anthropology, economics, history, political science, psychology, or sociology course; or permission of the instructor.

This course will discuss the development of modern cities in both developed and developing countries, focusing on urban social issues such as housing and homelessness, racial and ethnic segregation, urban sprawl, environmental issues, and urban redevelopment.

#### SOC\* K278 (formerly SOC K240) 3 CREDIT HOURS COMMUNITY RESEARCH

Prerequisite: Any 100-level anthropology, economics, history, political science, psychology, or sociology course; or permission of the instructor. Students volunteer with a community organization in a town of their choice, carrying out activities that will have some concrete result in addressing a social problem and meeting the needs of the community. Students may locate their own placement∞, with the instructor's approval, or work in a program of community research the instructor has developed with a local agency. Much of the work takes place at off-campus sites in the region. Students will gain experience in one or more primary research methods used by sociologists: participant observation, interviews, survey research, content analysis, or the use of existing documents. Students meet in a seminar a number of times to reflect on their experiences.

# **SPANISH**

#### SPA\* K111 (formerly SPA K101) 4 CREDIT HOURS ELEMENTARY SPANISH I

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course introduces the basic principles of the Spanish language and provides a cultural understanding of the Hispanic world. The emphasis of the course is on developing and applying the basic skills of language learning: listening, speaking, writing and reading, through classroom activities. Language laboratory is available.

#### SPA\* K112 (formerly SPA K102) 4 CREDIT HOURS ELEMENTARY SPANISH II

Prerequisite: SPA\* K111.

This course is a continuation of Elementary Spanish I. More advanced grammatical structures are introduced to continue developing the skills of language learning, to prepare students to begin expressing more complex thoughts in Spanish. Cultural topics and literary readings offer a wide range of historical, social, political and artistic information to increase the student's knowledge and understanding of the Spanish speaking world. Language laboratory is available.

#### SPA\* K211 (formerly SPA K201) 4 CREDIT HOURS INTERMEDIATE SPANISH I

Prerequisite: SPA\* K112. Corequisite: ENG\* K101 or ENG\* K1015. This course is an intensive and extensive review of grammatical principles offered in previous semester. More emphasis is given to communicative, writing and reading skills, and introduces selected readings from Spanish and Latin American writers. Course fulfills International/ Intercultural Requirement.

#### SPA\* K212 (formerly SPA K202) 4 CREDIT HOURS INTERMEDIATE SPANISH II

Prerequisite: SPA\* K211. Corequisite: ENG\* K101 or ENG\* K101S. This course is a continuation of Intermediate Spanish I. It offers further practice and review, continued work on communicative skills, composition, and readings from Spanish and Latin American authors. Course fulfills International/Intercultural Requirement.

#### SPA\* K296 4 CREDIT HOURS TEACHING ASSISTANTSHIP IN SPANISH

Prerequisite: At least two prior courses in Spanish or one course and previous experience, and permission of the instructor. In this assistantship, students will assist a faculty member in conducting an academic course offered in the field of Spanish. Students may lead discussion groups, work with individual students, organize field trips, make presentations, conduct research, coordinate tutoring sessions, evaluate and revise material, collaborate with the class, and/or other work to be arranged based on learning objectives.

# **SOCIAL SCIENCE**

## SSC\* K108 (formerly SOS K108) 3 CREDIT HOURS

# PERSPECTIVES OF SOCIAL SCIENCE

Prerequisites: ENG\* K096 placement∞. Please note: Students who are concurrently enrolled in, or have completed career Introduction 101-level courses are not eligible. This team-taught course has a twofold purpose. The first is to introduce students to the major ideas in the social sciences and to the similarities and differences in emphasis among the fields of anthropology, economics, history, psychology, political science, and sociology. The second goal is to develop students' abilities to think critically in the social sciences, to evaluate evidence, identify assumptions, and in general, to learn how we know what we know. Perspectives courses are most appropriate for degree students enrolled in any of the career programs. However, Liberal Arts or General Studies students are eligible.

#### SSC\* K210 (formerly SOS K210) 3 CREDIT HOURS WORLD ISSUES

Prerequisite: Any 100-level Social Science course, or permission of the instructor. This course surveys social issues con **Course Descriptions** 

fronting the people of the U.S. and other nations due to ever-increasing global interdependence. Topics vary from semester to semester depending on current concerns and interests. Topics often covered include: the impact of economic globalization on jobs and communities, the role of the U.S. military in the world, the international drug trade, changing immigration patterns, the globalization of hate groups, environmental destruction, population growth, global health issues, the survival of indigenous peoples, and women's rights as human rights. Attention is paid both to the underlying social patterns giving rise to world problems, and to solutions proposed by actors on the world scene, including elites, grassroots movements, and international organizations such as the UN. Course fulfills International/Intercultural Requirement.

# GENERAL ENGINEERING TECHNOLOGY

#### TCN\* K101 3 CREDIT HOURS INTRODUCTION TO ENGINEERING TECHNOLOGY

Corequisites: ENG\* K096 and MAT\* K095 or MAT\* K0951. Please note: if completing ENG\* K096 prior to enrolling in TCN\* K101, a grade of "C#" or better is required for registration into this course. The course begins college-level technological studies and shows the potential of further education and careers in technology fields. In particular the course introduces students to: the history of technology; the various fields of technology; the purpose and application of technology; the ethics of technology, and the limits and failures of technology. The course is team taught by technology faculty from several disciplines at the college with frequent guest speakers from local industry, government agencies, and other educational institutions. The course is composed of modules containing projects based on problems and challenges faced by local industry and case-studies drawn from technology education resources such as NETEC, the South Carolina Advanced Technology Education Center for Excellence, and the Manufacturing Education Resource Center. Field trips and laboratory exercises give students opportunities to carry out measurements and apply technological principles. Measurement results will be used in the paired algebra course and in class and homework exercises.

#### TCN\* K105 1 CREDIT HOUR LASER AND LAB SAFETY

This course introduces important concepts and regulations for safety in laser and manufacturing labs and other work settings. Topics include safe handling of lasers, safe use of hand and power tools, hazard awareness and accident prevention, exposure limits, administrative and engineering controls, chemical hygiene and safety planning. The course is a requirement for all students beginning the Manufacturing Engineering Technology or Laser & Optic Technology associate degree programs.

#### TCN\* K198 3 CREDIT HOURS SPECIAL TOPICS: INTRODUCTION TO SOLIDWORKS

Co-requisites: CAD\* K106 and CAD\* K107. This course and accompanying lab are designed to expand and enhance the student's ability to combine and apply mechanical design principles with Solid-Works computer design techniques and capabilities. This course covers all the basic functionality of drawing automation: view creation, section design, drawing creation, creation of families of parts varying assembly configurations, collision/ interference detection, assembly motion modeling and animation, 3 D photorealistic rendering of design, capture design intent in meaningful relationships between dimensions and geometries, mass properties, calculations: Mass, Volume, Surface Area, Center of Mass, Moments of Inertia, performs #D finite element and other kinds of analysis, ability to generate 3D CNC machine parts, rapid prototyping files, and accurate drawing. One hour lecture/discussion and four hours of lab per week.

#### TCN\* K291 3 CREDIT HOURS INTERDISCIPLINARY CAPSTONE DESIGN PROJECT

Prerequisites: Permission of the program coordinator.

This course provides students the opportunity to apply the concepts, theories, and practices developed throughout their Technology course of study in a one-semester capstone interdisciplinary project. Students will work together in teams to solve real-world problems related to their interrelated field(s) of study. Students will learn how to develop and present effective written and oral technical communications. A major portion of the course will be dedicated to hands-on lab time during which students will work on their projects. Throughout the course, faculty members will serve as consultants to guide the students and provide formative feedback. The course will culminate with a final technical presentation to faculty, students and invited industry guests. This course is intended for students in the second year of study.

#### TCN\* K295 (formerly GTS K2995) 3 CREDIT HOURS GENERAL ENGINEERING TECHNOLOGY CO-OP

Prerequisite: Permission of the program coordinator.

Corequisite: Students must have completed all freshman level technology courses and have a GPA of 2.50 or better. In this course, students will work in industry gaining hands-on experience while applying academic knowledge acquired during their first year of classroom/ laboratory college education. A specific project will be agreed upon by the co-op student, industry supervisor, and faculty advisor. A minimum of 225 documented industry contact hours must be devoted by the co-op student during the semester internship.

## THEATRE

## THR\* K101 (formerly THE K111) 3 CREDIT HOURS

## INTRODUCTION TO THEATER

Prerequisite: ENG\* K101 or ENG\* K101S placement∞ or completion of ENG\* K096 with a "C#" grade or better. This course is a basic survey of theatre including: the literature, history, structure, critical theory, theatre arts, and important figures. Note: This course satisfies the fine arts requirement.

#### THR\* K110 (formerly THE K117) 3 CREDIT HOURS ACTING I

Acting is the art of giving tangible life to the characters in a play. To do this actors use their physical, mental, and emotional apparatus individually and in concert with their peers. This course deals with these basic issues as well as the many other related topics that arise naturally from them.

#### THR\* K115 (formerly THE K113) 3 CREDIT HOURS IMPROVISATION

This is a workshop course designed to make actors aware of themselves as creative instruments, working in orchestration with others to develop theater pieces.

#### THR\* K121 (formerly THE K121) 3 CREDIT HOURS PLAY IN PRODUCTION I

This course will examine all aspects of production of a play. Students will work within the limitations of the college environment and explore stage management, publicity, costuming, makeup, limited set design, lighting, script analysis, and of course, acting. One play will be the focus of the course and will be presented at the end of the session.

#### THR\* K210 (formerly THE K219) 3 CREDIT HOURS ACTING II

Prerequisite: THR\* K110 or permission of the instructor.

This course builds on the skills and content taught in Acting I with greater emphasis on movement and expression in historical "period" acting pieces from 1400 to 1880 as well as in post-modern pieces. The concentration will be on European styles of acting.

#### THR\* K223 (formerly THE K221) 3 CREDIT HOURS PLAY IN PRODUCTION II

Prerequisite: THR\* K121.

This course is a continuation of THR\* K121. Students will assume a leadership role in the production of a play, such as a more advanced acting role, publicity coordinator, stage manager, producer, technical supervisor, or assistant to the faculty director.

# **WOMEN'S STUDIES**

#### WMS\* K105 3 CREDIT HOURS GENDER IN THE EVERYDAY WORLD

Prerequisite: ENG\* K101 or ENG\* K101S placement $\infty$  or completion of ENG\* K096 with a "C#" grade or better.

This course introduces students to the historical and contemporary issues that have shaped and affected women's lives within the discipline of Women's Studies. It offers students the opportunity to learn about the feminist movements and women's contributions toward social change. Emphasis will be on family, health, work, education, religion, violence against women, and popular culture. Incorporates projects that promote social change and the empowerment of women. This course fulfills a liberal arts and sciences and/or humanities elective requirement. It does not fulfill a social sciences elective requirement.

# WASTEWATER

#### WWT\* K110 (formerly ENV K1300) 3 CREDIT HOURS WASTEWATER I

Corequisites: MAT\* K172 and WWT\* K112. This course will introduce students to the safe and effective operation and maintenance of wastewater treatment plants. Basic operational aspects will be covered including grit removal, sedimentation and flotation trickling filters, biological contractors, activated sludge, waste treatment ponds, and disinfection and chlorination. Upon successful completion, students will be prepared for the State of Connecticut Wastewater Class I Operator examination.

#### WWT\* K112 (formerly ENV K1400) 3 CREDIT HOURS WASTEWATER II

Corequisites: MAT\* K172 and WWT\* K110. In this course, the applications of the theoretical principles of wastewater treatment processes will be investigated and reinforced through the use of specific examples from wastewater treatment laboratories. Students will participate in site visits to municipal wastewater treatment facilities and prepare a comprehensive study of a wastewater treatment plant.

## WWT\* K114 (formerly ENV K2222) 3 CREDIT HOURS

**WASTEWATER III** *Prerequisites: MAT\* K172; WWT\* K110;* 

WWT\*K112. Corequisite: WWT\* K116. In this course, the safe and effective operation and maintenance of wastewater treatment facilities will be further investigated with an emphasis on larger, conventional treatment plants. Topics include activated sludge, sludge digestion and handling, effluent disposal, plant maintenance safety and housekeeping, and laboratory procedures. Computer use and application in the laboratory for data acquisition and analysis will also be covered. Students completing the course will be prepared for the State of Connecticut Wastewater Operator Class II examination.

#### WWT\* K116 (formerly ENV K2223) 3 CREDIT HOURS WASTEWATER IV

Prerequisites: MAT\* K172; WWT\* K110; WWT\* K112. Corequisite: WWT\* K114. In this course, students will participate in an internship at an operating wastewater treatment facility. A comprehensive report for the project will be required for successful completion of the course.