<u>Syllabus</u>
Three Rivers Community College
MAT 256-Calculus 2 Room D107
Spring 2015 Wed 5:30-9 PM (CRN) 10412

Instructor:
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    Office: C124   Phone: 860-215-9420
    Office Hours: Wed 4:00-4:50, Thurs 10-11:50 in office Room C124

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..

Text: Calculus by James Stewart, 7th edition, Early Transcendentals (available as an interactive e-book on www.Webassign.com)

Online Homework: www.webassign.com   login for a free 14 day trial using the COURSE KEY **trcc.mohegan 0147 9745**
If you already have Webassign from Calc 1, you should be able to log into this course for free.

You will be able to create your own login and password. The institution code is trcc.mohegan. Please enter an accurate email address, since this will be the email when I send out announcements to the class.

Webassign includes an interactive copy of the text, lecture videos, great review and practice problems and homework hints. Since you have WebAssign, you do not need a hard copy of the text. WebAssign is good until the text goes to a new edition.
- Webassign is free for 14 days so use it early, decide if you want to purchase it for the semester.
- There is also a Webassign edition of the text in softcover that come with the code for less than the purchase of the hardcopy of the text.
- If you have an access code from your precalc text, and did not use it, it will probably work for the Calculus course.
- One option is to use the free trial for 13 days, then use a credit card to pay $75- $110 when prompted at the login to extend your use of Webassign beyond the free trial.

 Note: you do not need to purchase a hard copy of the text if you have webassign.

Calculator: You will need some calculating and graphing device. You may use calculator apps for your ipods or laptops. The most often used calculator is the TI 89 or 84. Instead of a calculator you may use any of the free math programs downloadable from the web. Two free computer algebra systems are Wolfram Alpha and Microsoft Mathematics available at www.microsoft.com/mathematics . Though you don't need a computer algebra system for this course, you will want to become familiar with one.

Tutoring at TASC: You may sign up for a regular free tutor session in the tutor center in Room C117 by the library. Appointments fill up quickly, so call the tutor desk is 860-215-9082, as soon as you think you might want to engage a tutor on a regular basis. Walk in tutoring is on a space available basis.

Grading Policy:
There will be 3 tests, 5 quizzes, homework problems, and a cumulative final exam. The final exam counts double a test. Students who receive lower than 40% on the final exam will fail the course regardless of their other grades.

You will be given the opportunity to retake one of the 3 tests during the last week of the course. IF you miss a test during the regularly schedule time, you will receive a zero for that test. At the end of the semester, anyone can make up one test or re-take any test.

IF you do the homework problems on Webassign, I will count your homework grade as the equivalent of 1 test, IF it improves your grade. To determine your homework grade, divide the total number of problems assigned for the semester divided by the total. IF you do 80% of the problems correctly, I will give you a 100% for the Homework Grade.

I encourage everyone to work collaboratively and to use any resources to do the homework, however, if you submit a homework problem, then I will assume you understand the problem and could do it again if asked.

Grade distribution:
IF you do homework on Webassign:
Each of the 3 tests count a total of $1/7^{th}$ of your final grade. (about 14% each test),
5 quizzes count for a total of 1/7 of your final grade which is about 3% each
Homework Problems count $1/7^{th}$ which is about 14%, and the
Final exam counts $2/7^{th}$ (about 28%) of the final semester average.

IF you do NOT do homework on Webassign:
Each of the 3 tests count a total of $1/6^{th}$ of your final grade. (about 17% each test),
5 quizzes count for a total of 1/6 of your final grade which is about 3% each
Homework Problems count $1/6^{th}$ which is about 17%, and the
Final exam counts $2/6^{th}$ (about 33%) of the final semester average.

Digication and General Education:
Each student has a subscription to DIGICATION, an electronic portfolio, that is active forever. As part of your general education requirements, you will upload your work from one of the class assignments onto DIGICATION for me to grade. More information and guidance will occur when the time comes.

College Withdrawal Policy and the N (no show) grade:
You may withdraw from this class any time up to and including May 12, and you will receive a W grade on your transcript. However, you must complete a withdrawal form in the Registrar's Office at the time of withdrawal; if you merely stop attending classes before April 10, you will receive a grade of "N" which means "no show". Financial aid students MAY have to reimburse the college for courses in which they have an N. If you do not take the final exam, you will receive a grade of F, regardless of the other work you do. No one's signature other than your own is required on the Withdrawal form. However, I strongly suggest you discuss your withdrawal with me before you submit the forms so that we can discuss your status and your options. Financial aid students should also discuss withdrawal from a course with a financial aid counselor so that you know the monetary ramifications.

Disabilities Statement:
If you have a hidden or visible disability that may require classroom or test-taking modifications, please see me as soon as possible so arrangements can be made. If you have not already done so, please contact the Learning Specialist, Chris Scarborough, at 860-892-5751 to obtain the proper accommodation credentials.

Academic Integrity:
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. Collaboration is encouraged on many assignments such as seminar assignments and homework. Tutors are available to assist you with this sort of work.

In-class tests and the final exam are considered individual work and must be completed without unauthorized assistance of any kind, including help of other students, tutors, unauthorized technology or notes. All test material is to be turned in with the test paper. Attempting to bring work out of the testing area and/or share that work with other students is consider cheating. Cheating on tests, misrepresentation of attendance, falsifying records, or lying will result in loss of credit for all work involved.

I encourage you to collaborate on homework, take-home problems, projects, etc. However, you must understand what you hand in to me. I may verify that you have learned the material

covered by the work you have handed in by asking you to explain your work. I may give you a 0 on any work you hand in or any answers you submit that you do not understand or can not explain.

A full copy of the college's academic integrity policy is in the school's catalog and in the student handbook.

Emergency Closings or class cancellations
If the college administrators decide to issue an emergency school closing, you can receive immediate notifications if you go to My.Commnet.edu and register for the mycommnet.ALERT. You will then receive phone or text messages as soon as a closing is announced. The Alert is more reliable than my email, since sometimes I lose internet service during a storm. If the college is openm and I have to cancel class or office hours, I will email everyone, so please be sure your email on Webassign is correct.

Schedule of classes   Calculus 2 Spr 2015   Professor June Decker

 Week 1
This week Jan 28 - SNOW DAY! please learn how to use Webassign (www.webassign.com course id is trcc.mohegan 0147 9745) you get a free trial till Feb 11.
You are responsible for learning sections 12.1-12.3 on vectors. Click on the e-book on Webassign to see the text, videos and animations. You need to click on the Name of the text, not the picture of the book.

 Week 2
Feb 4 - review Sections 12.1-12.3
12.4 Vector cross products
Review integration in ch 5 of text.

 Week 3
Feb 11- 6.1 Determining Area using Integration.
review ch 5 "integration" from last semester.

 Week 4
Feb 18- Quiz on Area between 2 curves.
6.2 Volume of a cross sectional slice
6.3 Volume using cylindrical shells
6.5 Average value of a function

 Week 5
Feb 25 Quiz on Volumes: Discs and shells.

Review:Vectors, Integration, Areas, Volumes, and Average Value.
6.4 Work.
Prepare for test on March 4.
71. Integration by Parts

 Week 6
March 4 Test on Material to date:12.1-12.4, Ch 5 (a few review questions), Ch 6.

7.1 Integration by parts, (go over homework from last week)
7.2 Trig Integrals,
7.3 Trig Substitution, and
7.6 Integration using Tables and CAS (Computer Algebra Systems)

Week 7
March 11-Class canceled due to illness.

Week 8
March 25
7.4 Partial Fractions
7.5 General strategy for Integration
7.7 Approximate Integration
7.8 Improper Integrals
8.1 Arc Length

Week 9
April 1 Quiz ch 7.1-7.3, 7.6
9.1-9.3 Intro to differential equations

Week 10
April 8 Quiz 7.4-7.8, 8.1
10.1 Parametric Equations
10.2 Calculus with Parametric Curves

 Week 11
April 15 Quiz ch 9 Differential Equations
10.3 Polar Coordinates
10.4 Areas and Length in Polar Coordinates
Distribute Take Home test for chapters 7, 8.1, 9.1-9.3 and 10.1-10.4. Test Due April 22
11.1 Sequences

Week 12
April 22
11.2 Series
11.3 Integral test and estimates of sums
11.4 Comparison Tests
11.5 Alternating Series

Week 13
April 29 Quiz 11.1-11.5
11.6 Absolute Convergence, Root and Ratio Test
11.7 Strategy for Testing Series
11.8 Power Series
11.9 Representations of Functions as Power Series

Week 14
May 6 Quiz on 11.6-11.9
11.10 Taylor and MacLaurin Series
11.11 Applications of Taylor Polynomials

Week 15
May 13 Test on chapter 11 Sequences and Series from 5:30 till 7 PM .
At 7:15. Review for final exam.

May 20   Final Exam will take place during the class period in our classroom
Make up tests may be taken after the final exam or by arrangement with the instructor at another time.

Grades available May 22 on www.my.commnet.edu under your 'unofficial transcript'.