Syllabus

Three Rivers Community College
MAT 146 – Math for Liberal Arts
Spring 2012
Course Registration Number (CRN) – 10392 Sec. T2
M&W 2:00-3:15 pm, Main Campus, Rm. D-219
For a copy of this syllabus, homework assignments, class announcements, etc, log onto Blackboard/Vista from the MyCommNet link on TRCC's homepage

Instructor:

Matthew L. Burbine
Office: TASC (Tutoring Center), located in C-117, next to the Library
Office Hours: TBA. I will be in the TASC M-Th 11am-6pm but I will dedicate several hours per week solely to this class.
email: mburbine@trcc.commnet.edu
Office Phone: 860 885-2311
Home Phone: 860 599-5463

Course Description:

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.

Course Objectives:

This course should help students:
1. Learn how to learn both independently and collectively from peers rather than passive learning
2. Develop skills of inquiry, abstract and logical thinking, and critical analysis
3. Learn and apply concepts of mathematics

Prerequisites:

You must have successfully completed MAT 137, Intermediate Algebra, or have an acceptable placement score.

Required Materials:

The required text is:

- TITLE:Excursions in Modern Mathematics (MML)(Mystatlab) Pkg
- AUTHOR:Tannenbaum
- EDITION:7th
- COPYRIGHT YEAR:2011
- PUBLISHER:Pearson Education
- ISBN:9780321744562

You will also need to have a graphing calculator. I strongly urge you to get (buy, borrow, or whatever) a Texas Instruments TI 83+ or 84+ calculator, as this model is by far the best-suited one for this class and it is the one I will be using. You are free, however, to use any model or brand you like, but you will responsible for learning its use on your own.

Attendance:

Attendance in classes is strongly recommended. If you miss more than two classes, you will be at a disadvantage. If you miss four classes, you have missed too much material and you may be at severe risk of failing the class. *I will teach a class only once;* you are responsible for getting the class notes, homework, and any other assignments from another student and completing that work by the next week after any missed class. Also, short unannounced quizzes may be given and they cannot be made up.

Attendance at exams is mandatory. You will be informed of the dates of tests at least one week in advance. Make-up exams may be given *with my prior consent*. If you must miss an exam, please speak with me before the date of the exam so that arrangements can be made. Remember, *before the exam it's a reason, after the exam it's an excuse*.

Grading Policy:

Throughout the semester there will be four 100-point exams. The last exam will not be a cumulative final. Another possible 100 points will distributed among various assignments and projects, quizzes, and class participation. 5 points will be deducted for each class that an assignment or project is late. The final grade will be determined by adding the total points earned and dividing by five. Letter grade equivalents are listed below:

Grade	Grade Points	Quality Points
A	93-100	4.0
A-	90-92	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D+	67-69	1.3
D	63-66	1.0
D-	60-62	0.7
F	Below 60	0.0

Homework:

Homework will be assigned each week. *Unless specified otherwise*, I will not collect homework. However, I may give an unannounced quiz at the beginning of class that is taken directly from the homework. It is in your best interest, then, to do at least the assigned problems, if not more. The more you do any math, the easier it becomes. I will try to answer any homework problems at the beginning of each class, but we may have to curtail this to fit our time limits.

College Withdrawal Policy:

You may withdraw from this class any time up to and including May 7 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 you will be assigned whatever grade you have earned to date, with any uncompleted work counting as zero*. Any eligibility for refund of tuition is based on the date that the registrar receives the withdrawal.

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 892-5751.

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

Resources:

The Tutoring and Academic Success Center (TASC) is located in Rm. C-117, next to the Library. TASC provides free **one-to-one or group tutoring** in math as well as in many other subject areas. TASC also has **textbooks** (both old and current), **CDs & DVDs**, and many **handouts** available for student use. Also, TASC's portion of the school's website has many links to other **online resources**; go to the TASC homepage at http://www.trcc.commnet.edu/ed_resources/tasc/index.htm and follow the link to "Online Resources."

Free **online tutoring** is also available through Blackboard/Vista, which you access through MyCommNet.edu.

In addition to my regular hours in the Tutoring Center, I will make myself exclusively available to students in this class for at least two hours per week (we will decide the time slot(s) during the first class). Feel free to contact me any time, though, that you have a question.

Finally, one of your greatest resources is each other. I encourage you to get to know your classmates and **exchange contact information**.

Cell Phone Use:

Please turn off the ringer on all cell phones before the start of each class. If you have a situation where you absolutely must be able to take a call, please notify me before class.

"Do not worry about your difficulties with mathematics, I assure you that mine are greater."

Albert Einstein

Course Outline:

The material covered in this course will vary depending on the class interests. We will cover Chapter 1 and decide during the first week on other chapters to be covered. Expect to cover a total of 9 chapters out of the 16 chapters contained in the textbook.

A supplement to this syllabus will be distributed after the first week of classes.

Supplement to MAT 146, CRN 10392, Spring 2012.

Office Hours:
As announced in class, I will be available in my office in TASC (Rm. C-117) strictly for the members of this class for the 45 minutes following each class. I am also available on an appointment basis (as I am for all of TRCC's students) during the rest of the time I am in TASC.

Course Outline:
The class members submitted preference ballots on which chapters of the book to cover. I applied the Borda Count Voting method (from Ch. 1.3) and calculated an extended ranking (Ch. 1.6) of the chapters. Therefore, our goal is to cover the following chapters of the text (order and content are subject to change):

Chapter 1 – The Mathematics of Voting – The Paradoxes of Democracy
Chapter 3 – The Mathematics of Sharing – Fair-Division Games
Chapter 5 – The Mathematics of Getting Around – Euler Paths and Circuits
Chapter 6 – The Mathematics of Touring – The Traveling Salesman Problem
Chapter 7 – The Mathematics of Networks – The Cost of Being Connected
Chapter 8 – The Mathematics of Scheduling – Chasing the Critical Path
Chapter 9 – The Mathematics of Spiral Growth – Fibonacci Numbers and the Golden Ratio
Chapter 10 – The Mathematics of Money – Spending It, Saving It, and Growing It
Chapter 11 – The Mathematics of Symmetry – Beyond Reflection