

Math 130 Math for Social Sciences-Fall 2009

Section 1 (63040) Yates 104 TR 8 – 8:50 a.m. Register for labs 1 – 7 9:00 – 9:50 a.m.

Instructor: Lori Ziegelmeier, Weber 10, 491-3955, ziegelme@math.colostate.edu
Office Hours: TBA- see RamCt

Section 2 (63041) Chem A 103 TR 2:00 – 2:50 p.m. Register for labs 8 – 15 3:00 – 3:50 p.m.

Instructor: Beth Malmskog, Weber 17, 491-4274, malmskog@math.colostate.edu
Office Hours: Tuesday 11-11:50, Thursday 1-1:50

Note: you may attend any office hours listed for any instructor

Course website and RamCT pages: <http://www.math.colostate.edu/~freeman/m130/M130fa09.html>
<http://ramct.colostate.edu>
<http://online.math.colostate.edu/m130/>

Registration Deadlines: Last day to add: August 30
Last day to drop: September 9
Last day to W-drop: October 19

Textbook: *Excursions in Modern Mathematics, Custom Edition for Colorado State University*
by Tannenbaum (7th Edition) ISBN 0-13-187363-6

Calculator: Any basic calculator such as the TI-503 SV. You do not need a financial calculator for this class.

Worksheets: Available at the campus bookstore

Prerequisite Note: This course will **not** satisfy the prerequisite for Math 117, Math 118 or Math 124. If you need to take Math 117, Math 118 or Math 124 for your major, you should probably not take this course.

Grading Criteria: The course consists of one hour of lecture followed by one hour of lab. Lecture will cover highlights from the text. You should read the assigned sections prior to attending lecture. Lecture notes are available online; some students prefer to print off the notes and bring them to class. **Most of the grades will be assigned in Lab.** Worksheets, participation problems and quizzes will be done in labs. It is not recommended that you miss lab sessions as approximately 40% of the grade comes from regular attendance **and participation** in lab. Exams (except for final) are also given in labs.

Component:

Algebra: 10%
Quizzes: 10%
Worksheets: 20%
Projects: 10%
Participation: 10%
Exams: 25%
Final Exam: 15%

Grades:

A: 90% -100%
B: 80% -89%
C: 70% -79%
D: 60% -69%
F: below 60%

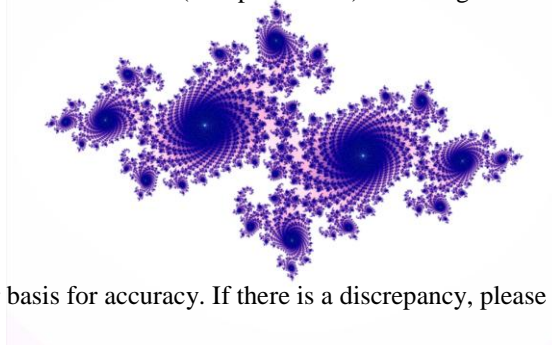
Grades will be posted on RamCt. Check your grades on a regular basis for accuracy. If there is a discrepancy, please discuss it first with your TA, then your instructor.

Algebra: The Algebra portion of the class is a review of basic algebra skills. There are two parts to this requirement. The first part is an [Online Algebra Review](#). The second part consists of going to the PACe Center, Weber 136, and completing two Unit Exams. Tell the PACe staff that you are there to take the M130 Algebra Exam. You must bring your Student ID (RAMCARD) to gain access to the PACe Center. It is not wise to wait until the last minute, as heavy traffic could affect your ability to access the website or get into the PACe Center. You are forewarned of this possibility and therefore no extensions will be granted for technological reasons. You will be graded only on your performance on the *two* Unit exams taken in the PACe Center. You have two attempts for each of the unit exams and only the best score will be counted. The deadline for completing the exams is Thursday September 10th at 9pm.

Quizzes: Each Thursday of a non-exam week, your lab assistant will administer a brief (10 minute) quiz which will be based on [homework problems](#) from the text and notes covering material from the previous two days of class. **There will be no make-up quizzes;** note, however, that your three lowest quiz grades will be dropped.

Worksheets/RamCt Exercises: Worksheets will be done in groups of 2-4 people during the lab hours. They will be assigned during the lecture hour and will be due, the same day, at the end of the lab hour. Each person in the group must submit the assigned worksheets. They will be stapled together, but only the top one will be graded. Please put the names of each group member on the front set that will be graded. Each worksheet will be graded out of 5 points. They must be legible and handed in on time or your lab assistant cannot accept them. The worksheets will be graded daily by your assigned lab assistant. Worksheets 1-4 may be handed in until September 8th without penalty. After September 8th, **no late worksheets will be accepted.** Worksheet packages are available for purchase in the bookstore.

RamCt Exercises: 5 assignments will be given on RamCt. These 5 assignments will be counted with the worksheets scores. Due dates will be announced in class and posted on the schedule. No make-ups will be allowed. Please note that your five lowest worksheet/RamCt scores will be dropped.



Projects: Two written projects will be due by December 3rd. Descriptions and instructions can be found on the course website. Three projects are offered, you must choose and complete two. Each project is out of 50 points.

Participation: Participation will be awarded for participating in labs. You may earn up to 2 participation points each lab session. You may earn these points by working on worksheets or participation problems assigned in class. If you do not stay to work on the worksheets or problems, you will not receive participation points.

Homework: A short list of homework problems related to the material covered each week is provided on the website. Although the problems will not be collected, it is in your best interest to do them, as the weekly quizzes (see above) will be based directly on them. Furthermore, some exam problems will relate to the homework assignments.

Exams: There will be three in-class exams. They will cover material from class notes, the book, worksheets, and homework assignments. Exams are administered in lab sections. The exam dates are:

Exam 1 - Tuesday, September 22

Exam 2 - Thursday, October 15

Exam 3 - Thursday, November 12

Please note that each exam will have 24 questions.

Final: There will be a comprehensive, two-hour final exam.

Please note that the actual exam will have 48 questions.

Section 001, morning (Ziegelmeier) - Thursday, December 17, 5:50 pm - 7:50 pm

Section 002, afternoon (Malmskog) - Tuesday, December 14, 11:20 am - 1:20 pm

The final will be given in the same rooms as lecture, unless announced otherwise in class.

You may NOT arrange to take the final early or late; NO EXCEPTIONS.



Missing Class: No late work is accepted in MATH 130. If you are planning on missing a class, you may turn in worksheets early. You will not receive participation credit for missed days. Quizzes may not be made up unless the absence can be documented as a university sponsored event. If you are missing class for a university-sponsored event (i.e. Athletics), please contact your instructor (preferably by e-mail) **one week** prior to the event in order to make arrangements regarding the work you will be missing. You will be required to provide **written documentation** (from your coach, director, faculty sponsor, etc.) of the event. Worksheets, etc. may not be accepted unless arrangements are made prior to the absence.

Missing an Exam: If you are going to miss an exam, please fill out the Alternate Exam Request form (available online), attach appropriate documentation, and return to your instructor at least one week prior to the exam. You will receive confirmation of your request if approved. Occasionally, an emergency such as a sudden illness requiring a doctor's visit or a death in the family may mean that you miss an exam. In such cases, you must notify the instructor of *your* section by telephone or email within 24 hours of the missed work. **If you are unable to reach your instructor, please leave a message for her with the Mathematics Department office: 491-1303.** You will be required to provide **written documentation** of your emergency before you will be allowed to make up any missed work.

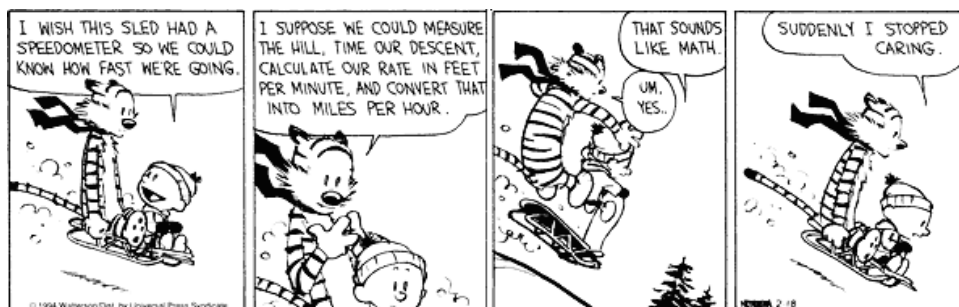
Unacceptable absences: If you miss course work for a reason not covered by the two previous paragraphs, you will not be allowed to make it up. In particular, "My mom bought this plane ticket months ago," "I have to drive to Dallas for a wedding," etc. are not valid excuses for missing work. Questions about this policy should be addressed to the course coordinator.

Honesty Policy: Exams must be completed individually. No group work or outside assistance is allowed. Any student found to have engaged in academic dishonesty (i.e., cheating on an exam or giving a false excuse for making up an exam) will receive a zero on the exam and be subject to further University disciplinary action.

Even though worksheets are completed in groups, you are responsible for understanding the material yourself. If you add your name to a group without having completed your own worksheet you will receive a zero on that worksheet.

ADA Statement: The Americans with Disabilities Act requires that reasonable accommodations be made for students with disabilities. If you need such assistance, please contact your instructor as soon as possible. Specifically, please bring RDS forms to the instructor no less than one week before an exam.

Overrides: Neither the instructors nor the course coordinator are authorized to give an override into the course. If you have an extreme issue and need to take the course (i.e. graduating senior etc.) please go to Weber 101 on Wednesday August 26th, between 8:00 am and 4:00 pm.



Math 130 Calendar for FALL 2009

Date	Lecture	Lab
Week 1		
August 25	Algebra Review	No Lab - work on Online Algebra , RCE#1
August 25	RamCt Exercise #1 available from 8/25 to 9/13	
August 27	Algebra Review	No Lab - work on Online Algebra , RCE#1
Week 2		
September 1	Read Sections 1.1-1.3	Worksheets: #1 Plurality, #2 Borda Count
September 1	RamCt Exercise #2 available from 9/1 to 9/9	
September 3	Read Sections 1.4-1.5	Quiz 1 , Worksheets: #3 Plurality with Elimination, #4 Pairwise Comparisons
Week 3		
September 8	Read Section 1.6 and Chapter 1 conclusion	Worksheets: #5 Rankings, #6 Fairness Criteria
September 10	Read Sections 2.1-2.3	Quiz 2 , Worksheets: #7 Weighted Voting, #8 Banzhaf I
September 10	Deadline for Completing Algebra Exam: 9:00pm	
Week 4		
September 15	Read Sections 2.4-2.5	Worksheets: #9 Banzhaf II, #10 Shapley-Shubik
September 17	Read Sections 3.6, 3.7	Quiz 3 , Worksheets: #11 Sealed Bids, #12 Method of Markers
September 17	RamCt Exercise #3 available from 9/17 to 9/21	
Week 5		
September 22	Review for Exam 1	Take Exam 1 Covering Chapters 1-3, Worksheets 1-12
September 24	Read Sections 4.1-4.3	Worksheets: #13 Hamilton's Method, #14 Lowndes' Method
Week 6		
September 29	Read Sections 4.4-4.6, 5.1, 5.2	Worksheets: #15 Jefferson's Method, #16 Overview
September 29	RamCt Exercise #4 available from 9/29 to 10/7	
October 1	Read Sections 5.3-5.5	Quiz 4 , Worksheets: #17 Graph Modeling, #18 Postal Problem
Week 7		
October 6	Read Sections 5.6-5.7	Worksheets: #19 Fleury, #20 Euler Circuits
October 8	Read Sections 6.1-6.4	Quiz 5 , Worksheets: #21 Hamilton Circuits, #22 TSP
Week 8		
October 13	Read Sections 6.5-6.8	Worksheets: #23 Nearest Neighbor, #24 Cheapest Link
October 15	Review for Exam 2	Take Exam 2 Covering Chapters 4-6 and Worksheets 13-24
Week 9		
October 20	Read Sections 7.1-7.3	Worksheets: #25 Trees, #26 Trees II
October 22	Read Section 9.1-9.3, pages 346-347	Quiz 6 , Worksheets: #27 Fibonacci Numbers, #28 Honey Bees
October 22	RamCt Exercise #5 available from 10/22 to 10/28	

Week 10		
October 27	Read Pages 474-481	Worksheets: #29 Salamanders and Pangolins, #30 Brightville
October 29	Read Sections 10.1-10.4	Quiz 7 , Worksheets: #31 CDs, #32 Exponential Growth
Week 11		
November 3	Read Sections 15.1, 15.2, 15.4	Worksheets: #33 Probabilities, #34 The Multiplication Rule
November 5	Read Sections 15.5-15.7	Quiz 8 , Worksheets: #35 What Chance Have You Got?, #36 Cars and Dogs
Week 12		
November 10	Read Supplemental Material (PDF)	Lecture Notes Worksheets: #37 Weighted Average, #38 Expectations
November 12	Review for Exam 3	Take Exam 3 covering Chapters 7,9,10,15, and Worksheets 25-38
Week 13		
November 17	Read Sections 14.3,16.1-16.2	Worksheets: #39 Summaries, #40 Normal Distribution
November 19	Read Sections 8.1-8.2	Quiz 9 , Worksheets: #41 Project Digraphs
Thanksgiving Break		
Week 14		
December 1	Read Sections 8.3-8.4	Worksheets: #42 Precedents in Project Digraphs #43 List Processing
December 3	Read Sections 8.5-8.6	Quiz 10 , Worksheets: #44 Critical Paths, #45 Finding a Good Priority List
December 3	Projects Due in Lab - Project Directions	
Week 15		
December 8	Review for Finals	Student Evaluation Forms,Review
December 10	Review for Finals	Quiz 11 , Review
Week 16		
Tuesday, December 15, 11:20 am - 1:20 pm: Final Exam for Section 002, afternoon (Malmskog), Location: same room as lecture		
Thursday, December 17, 5:50 pm - 7:50 pm: Final Exam for Section 001, morning (Ziegelmeier), Location: same room as lecture		