| Syllabus for: Math 5 Contemporary Mathematics | | | |
|---|----------------------------------|--|--|
| Semester & Year: | Spring 2013 | | |
| Course ID and Section | MATH-5-E2698 (032698) | | |
| Number: | | | |
| Number of Credits/Units: | 3 | | |
| Day/Time: | TTh 11:40am-1:05pm | | |
| Location: | PS 120 | | |
| Instructor's Name: | Buntin | | |
| Contact Information: | Office location and hours: | | |
| | Mon, Thurs 10-11am (PS 116) | | |
| | Phone: (707) 616-6169 | | |
| | Email: amber-buntin@redwoods.edu | | |
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Course Description (catalog description as described in course outline):

An approved CR and CSU General Education course designed primarily for non-science majors. This course is a study of selected topics from contemporary mathematics. Typical topics, which are chosen by the instructor, will be from areas including: inductive and deductive reasoning, mathematical modeling and analysis of linear and exponential functions, geometric symmetries, geometry of fractals, sequences and series, dynamics of population growth, statistics, mathematics of finance and management science, mathematics of methods of voting, fair division, and problem-solving techniques.

Student Learning Outcomes (as described in course outline):

1. Accurately communicate mathematical ideas using correct mathematical notation, graphs, and vocabulary.

2. Demonstrate appropriate use of the graphing calculator or other technology to explore mathematical concepts and verify their quantitative conclusions.

3. Solve problems and applications demonstrating the skills required for college-level mathematics.

4. Examine the quantitative arguments on both sides of issues currently in the news.

5. Explain the concepts of mathematics of social choice, statistics, growth, symmetry, finance, and/or management science and use the concepts to solve problems in these fields.

Special accommodations: College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit

from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.

Academic Misconduct: Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.

The student code of conduct is available on the College of the Redwoods website at: <u>http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20</u> <u>final%2002-07-2012.pdf</u>

Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods homepage.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

Math 5 – Contemporary Mathematics

Tues/Thurs – 11:40 ~ 1:05pm – PS 120 Course number 032698

Instructor

Amber Buntin, Department of Mathematics Email (Preferred): <u>amber-buntin@redwoods.edu</u> Phone: 476-4100 x 3196 My Webpage: <u>http://msemac.redwoods.edu/~abuntin/index.html</u> Office hours (Held in PS 116): Mon/Thurs 10 – 11 am and available by appointment My Mathlab hours (Held in the LRC): Wed 11 – noon

Course Description

As stated in CR's catalog: An approved CR and CSU General Education course designed primarily for non-science majors. This course is a study of selected topics from contemporary mathematics. Typical topics, which are chosen by the instructor, will be from areas including: inductive and deductive reasoning, mathematical modeling and analysis of linear and exponential functions, geometric symmetries, geometry of fractals, sequences and series, dynamics of population growth, statistics, mathematics of finance and management science, mathematics of methods of voting, fair division, and problem-solving techniques. *Prerequisite: Math 120 with a grade of "C" or better (or equivalent course), or appropriate score on the math placement exam.*

Classroom Environment and Attendance

It is essential to our class that both the students and teacher behave in a manner that will provide a comfortable learning atmosphere. Be respectful of one another. You should not hesitate to ask questions nor feel embarrassed to ask for help.

Class time is valuable and while sometimes we will work on activities as a class, I ask that you DO NOT complete homework in class. Students miss the current material when working on assignments in class and often fall behind.

You are expected to arrive on time and to leave when the class is dismissed. Arriving late or leaving before class is dismissed is disruptive and disrespectful to your fellow students as well as your teacher. Please be prepared with your headphones put away and cell phones turned off. If you must miss a day, please check with a classmate to see what you missed. If you miss more than 3 classes, your grade may be dropped $\frac{1}{2}$ of a letter grade.

Course Learning Outcomes

1. Accurately communicate mathematical ideas using correct mathematical notation, graphs, and vocabulary.

2. Demonstrate appropriate use of the graphing calculator or other technology to explore mathematical concepts and verify their quantitative conclusions.

3. Solve problems and applications demonstrating the skills required for college-level mathematics.

4. Examine the quantitative arguments on both sides of issues currently in the news.

5. Explain the concepts of mathematics of social choice, statistics, growth, symmetry, finance, and/or management science and use the concepts to solve problems in these fields.

(These CLOs will be assessed throughout the semester and may take the form of, but are not limited to, a written/paper assignment, an imbedded test question, or an OPTIMATH quiz)

Grades

| Homework | 35% | 90~100% | A | |
|----------------------|-----|---------|----|---|
| Activities | 15% | 80~89% | В | |
| Quizzes/Exams | 30% | 70~79% | C | |
| Final Poster Project | 20% | 60~69% | D | |
| | | 0~59 | 9% | F |

*** Final grade is at the professional discretion of the instructor ***

Required Materials

Text

Using and Understanding Mathematics (4th edition), by Bennett and Briggs

Your textbook is free and is available to check out for the semester from the CR library. The solutions manual is also available for short-term check out.

<u>Supplies</u>

A graphing calculator is **required** (TI-83+ or TI-84 recommended) and available to rent from math department for \$20 per semester, pencils and erasers, a binder and notebook paper to complete homework, ruler or straightedge and graph paper.

Homework

Homework problems will be assigned regularly, and are handed in on the announced due date at the beginning of class. You are encouraged to work together on your homework assignments (not copy, but collaborate). Assignments will vary in points possible. Typically I will randomly select 4~5 problems to grade. Points are also reserved for neatness and completeness. It will benefit you to check (not copy) your ODD numbered answers in the back of the book.

At the end of the semester your lowest homework score will be dropped from your grade. I will accept homework ONLY <u>one class period late and you will receive a 20%</u> <u>reduction in your score</u>. It is your responsibility to ensure that you get your HW turned in; if you know you will be missing class, you should turn your HW in <u>before the due</u> <u>date</u> or send it with a friend to class. I also accept homework that is scanned and emailed to me BEFORE start of class on the due date (please email as a .pdf file and make sure it is legible).

I recommend being organized and keeping all "scratch work," and returned work in a binder. You are expected to use proper mathematical notation as learned in class. All HW should be neat, legible and well organized. Messy papers will get point deductions and may even be returned ungraded. (See "Homework Guidelines").

The assignments may take a great deal of time so I recommend you:

- <u>read the section</u> of the textbook that is going to be covered BEFORE the class lecture.
- <u>start working on HW as soon after class as possible</u> this way you will have plenty of time to ask for help. (start assignments as soon as we start the lecture for that section)
- set aside at least 1-2 hours for each hour of class time, to do assignments.

Set yourself up to succeed: do a little bit at a time. Remember, homework is a worthwhile investment since it is where a great deal of your learning for this course will take place.

Quizzes and Exams

In this course there will be both quizzes and exams. I will announce the dates of in-class quizzes at least one class period on advance and Exams at least one week in advance. I will also schedule study sessions for exams (either inside or outside of class). All exams need to be taken in class ON THE DAY OF THE EXAM unless you have made prior arrangements with me. <u>There are **NO EXAM MAKE-UPS**</u>. Bring a pencil, your calculator and be ready to show me your math skills!

Final Poster Project

More detailed directions will be given later in the semester. These posters will be displayed during our final exam class. You will say a few words describing your topic and we will critique/grade one another's posters following a rubric.

****Final Exam**** Tuesday, May 7th, 10:45-12:45pm

Tutoring

- If you think you may need extra support, you should enroll in MATH 52L for 1/2 unit or 1 unit of credit in order to obtain supplementary help. This is the cheapest tutoring option available on campus and I can't stress enough how valuable it is.
- OPTIMATH practice assignements give immediate feedback and written out solutions: <u>http://msenux.redwoods.edu/cgi-bin/online/s13/OTcreatepracticequiz.cgi?course=math5</u>
- The CR Math Jam webpage is a great way to review algebra and contains lessons as well as OPTIMATH assignments: <u>http://mathrev.redwoods.edu/mathjam/?s=public</u>
- GUID~145~ Applied Study Skills & Strategies (required weekly meetings). Work with a tutor and other students to aid your success in Math 5 (36 hrs req).

Disabilities and DSPS

If you have a documented disability or believe you can benefit from any of the services offered by Disabled Student Programs & Services (DSP&S), please contact the DSP&S office (Building T20, behind Bookstore) at 476-4280 phone or 476-4418 fax

View Your Grades

You may view your grade anytime by going to my webpage: http://msemac.redwoods.edu/~abuntin/Math5/grades/grades.html

Grades will be updated regularly and it will be expected that you will be responsible for checking your grade often and coming to see me if you have any problems.

To check your grade, you will need to enter the following information:

Username: Last name, First name

Password: CR student ID number (with NO leading zero)

You must use a capital letter for the first letter in your first and last name. There is also a **comma and a space** between your last and first name. If you enter your information incorrectly, the system will not let you log on. Email me immediately if you are having problems.

Cancelled Classes

Those driving long distances to attend classes are advised to call (707) 476-4210 before driving to the CR campus. Choose **#5** from a menu of choices. You will then be advised of any cancelled classes for the day in the Physical Sciences complex (math/science). Thus, you can avoid the frustration of driving to campus, only to find that your class has been cancelled.

Faculty Withdrawal of Students

Math Department's Policy: A student who is absent from class for the amount of time equal to two weeks of classes, will be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a timely manner. This "faculty withdrawal" can occur between Week 4 and Week 10 of the semester.

Academic Honesty

Cheating is not accepted. If you are cheating, you will receive a grade of F in the course. Any violation of academic misconduct will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. The student code of conduct is available on the College of the Redwoods website at: <u>http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf</u>

How to Succeed in this Course

- <u>Read your text.</u> It is best if you read the section of the text <u>ahead</u> of the scheduled lecture date on that topic.
- <u>Be in class</u> on time every day.
- <u>Do your homework!</u> Plan to spend at least 1-2 hours outside of class for every hour inside of class. That is the minimum investment of time for success in this course.
- <u>Work with classmates</u>. Mathematics is a social subject (but not a spectator sport). Working with fellow students helps in your own understanding of the ideas of the course.
- <u>READ and KEEP your returned work.</u> When you get work back, look for any remarks that I have made. Keep your work in a binder to keep a record of your scores. This is to make sure I correctly enter your grades.

Final words

A few words about my expectations for you and myself in this course: My responsibilities include coming to class prepared to teach you mathematics, giving clear lectures, assigning carefully chosen homework problems that are relevant to our course and carefully preparing exam questions that accurately measure your progress in the course. Additionally, I am responsible to be available to you outside of class for consultation in office hours.

Likewise, I believe that you are ultimately responsible for your college education and I expect you to come to class motivated to learn the material. This involves keeping up with homework assignments, seeking additional help, either from me or from the many resources available to you here on campus, before it is too late.