

**MATH 3130-004: Linear Algebra, Spring 2010**  
**MWF 3:00-3:50 PM, MUEN E130**  
**August 23 – December 10, 2010**

**General Information:**

**Instructor:** Michael D. Roy   **Office:** MATH 216   **Office Hours:** M 1:00-1:50  
**Email:** roymd@colorado.edu   **W 4:00-4:50**  
**Course Webpage:** <http://euclid.colorado.edu/~roymd/m3130/>

**Prerequisites:** MATH 2300 or APPM 1360 (Calculus II), or equivalent

**Text:** Bretscher, *Linear Algebra with Applications*, 4th ed. (Prentice Hall) 2009.

**Course Outline:** This course will cover basic properties of systems of linear equations, vector spaces, linear independence, dimension, linear transformations, matrices, determinants, eigenvalues, and eigenvectors. This material is covered in Chapters 1-8 of the text. I recommend that you also review the appendix.

**Homework:** Homework will be assigned on Fridays and be due the following Friday. The schedule of assignments is at <http://euclid.colorado.edu/~roymd/m3130/hw.pdf> and will be updated throughout the semester.

You are welcome and encouraged to collaborate with your peers on the homework, but each student is expected to write up and hand in his or her own solutions. Homework may be turned in early if you wish, but **LATE HOMEWORK WILL NOT BE ACCEPTED** except in extraordinary situations. However, your lowest two homework scores will be dropped.

Note that many of the odd-numbered problems have answers given in the back of the book; I will post solutions to the others periodically on the course webpage.

**Exams:** There will be three midterm exams (**Sept. 17, Oct. 15, and Nov. 12**), each worth **15%** of your overall grade, and one final exam (**Thursday, Dec. 16, 10:30–1:00**), worth **30%**. All midterm exams will be held at the same time and place as the regular class. The location of the final exam will be announced when it is known. Calculators will not be allowed on the exams. The final exam will be cumulative.

**Grading:** You will be graded on your written work, which will be judged on the basis of *correctness*, *completeness*, and *legibility*. Your final grade will be determined by the scores of your homework and exams. To combine these items the following weights will be used:

**Homework:** 25%  
**Midterm Exams:** 15% each  
**Final Exam:** 30%

There will be no extra credit assignments.

**Getting Help:** Don't wait until it is too late if you need help. Feel free to ask questions at any time during class, or to schedule an appointment to see me outside of class. I will also answer questions asked via e-mail.

**UMRC:** The Undergraduate Mathematics Resource Center is located in Math 175. It is open Monday through Thursday 9:00 AM - 5:00 PM, and Friday 9:00 AM - 2:00 PM. I will be in the lab from **1:00-1:50 on Wednesday and Friday**.

**Accommodations for disabilities:** If you qualify for accommodations because of a disability, please submit a letter to me from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, or <http://www.colorado.edu/disabilityservices>.

**Religious observances:** If you have any course-related conflicts due to religious obligations, please let me know as soon as possible so that accommodations can be made.

**Miscellaneous University Rules and Regulations:**

- **Honor Code:** All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Additional information on the Honor Code can be found at  
<http://www.colorado.edu/policies/honor.html>  
<http://www.colorado.edu/academics/honorcode/>
- **Classroom behavior policy:** Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at:  
<http://www.colorado.edu/policies/classbehavior.html>  
<http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#studentcode>
- **Sexual harassment policy:** The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships apply to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>