COURSE DESCRIPTION

One of the fastest growing professional occupations is in data analysis. The workplace demand for skilled analysts is expected to continue to be very strong with demand exceeding labor supply for at least the next decade. The primary goal of this course is to improve skills in understanding economic models and to apply an analytical interpretation that allows the student to understand multiple outcomes. Students will be expected to be proficient in both understanding economic concepts and applications. Computer Applications uses the Mathematica programming package as a complement to the economic concepts presented in class. Economic concepts will emphasize applied topics rather than a purely theoretical presentation. Students will learn the basics of applied economic modeling.

Students will be expected to complete weekly assignments that model economic applications using Mathematica.

Two exams will be given that cover the economic theory and materials presented in class. The exams will not include any Mathematica programming.

Students will complete a final project that covers an economic theory not covered in class that includes an applied model that can be demonstrated using Mathematica. Students will choose the theory they cover and each theory must not have been chosen by another student to avoid duplication.

Course Materials

Web Link for Mathematica Download
Grading

There will be 2 exams given during the semester. Exams will represent 67% of the class grade, Mathematica assignments and the final project the remaining 33%.

For your final grade, the grading scale is:

- 92.00%+ = A
- 90.00% - 91.99% = A-
- 88.00% - 89.99% = B+
- 82.00% - 87.99% = B
- 80.00% - 81.99% = B-
- 78.00% - 79.99% = C+
- 60.00% - 77.99% = C
- below 60% = F

Exam Schedule

Midterm Exam: Friday, February 27

Midterm Exam: Friday, April 24

Exams will be given in the classroom.

Important Dates

- November 23 – November 29: Fall Break
- December 11 - Last day of classes

The Fine Print

(1) The Boulder Provost's Disability Task Force recommended syllabus statement:

If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu.

If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and Illnesses guidelines under Quick Links at Disability Services website and discuss your needs with your professor.
Campus policy regarding religious observances states that faculty must make reasonable accommodation for them and in so doing, be careful not to inhibit or penalize those students who are exercising their rights to religious observance. Faculty should be aware that a given religious holiday may be observed with very different levels of attentiveness by different members of the same religious group and thus may require careful consideration to the particulars of each individual case. See [http://www.colorado.edu/policies/fac_relig.html](http://www.colorado.edu/policies/fac_relig.html)

If you have questions about providing students with religious accommodations, please contact the Office of Discrimination and Harassment at 303-492-2797.

A comprehensive calendar of the religious holidays most commonly observed by CU-Boulder students is at [http://www.interfaithcalendar.org/](http://www.interfaithcalendar.org/)

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, {{insert your procedures here}}

See full details at [http://www.colorado.edu/policies/fac_relig.html](http://www.colorado.edu/policies/fac_relig.html)

(3) Faculty and students should be aware of the campus "Classroom Behavior" policy at [http://www.colorado.edu/policies/classbehavior.html](http://www.colorado.edu/policies/classbehavior.html) as well as faculty rights and responsibilities listed at [http://www.colorado.edu/FacultyStaff/faculty-booklet.html#Part_1](http://www.colorado.edu/FacultyStaff/faculty-booklet.html#Part_1)

These documents describe examples of unacceptable classroom behavior and provide information on how to handle such circumstances should they arise. Faculty are encouraged to address the issue of classroom behavior in the syllabus.

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, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, 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/policies/classbehavior.html) and at [http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code)

(4) The Office of Discrimination and Harassment recommends the following
syllabus statement:

The University of Colorado Boulder (CU-Boulder) is committed to maintaining a positive learning, working, and living environment. The University of Colorado does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. (Regent Law, Article 10, amended 11/8/2001). CU-Boulder will not tolerate acts of discrimination or harassment based upon Protected Classes or related retaliation against or by any employee or student. For purposes of this CU-Boulder policy, "Protected Classes" refers to race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, or veteran status. Individuals who believe they have been discriminated against should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Student Conduct (OSC) 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

(5) The Boulder campus has a student Honor Code and individual faculty members are expected to familiarize themselves with its tenets and follow the approved procedures should violations be perceived. The Honor Council recommended syllabus statement:

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; 303-735-2273). 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). Other information on the Honor Code can be found at http://www.colorado.edu/policies/honor.html and at http://www.colorado.edu/academics/honorcode/