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[ECON1078-003] **Mathematical Tools for Economists 1**

Fall 2022

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**Instructor:** Michelle Ko  
**Email:** [michelle.ko@colorado.edu](mailto:michelle.ko@colorado.edu)  
**Office:** ECON 313 or Zoom

**Time:** MWF 2:30 - 3:20 PM  
**Location:** Econ 117  
**Office Hours:** MW 11am -12pm, TTH 10-11am

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## Course Policies

- General Policies

- Lectures

Lectures in this course mainly consist of two parts; explanation of concepts and problem solving. In order to be successful in this course, **I strongly recommend that you attend lectures and take notes as I will provide lecture slides after class.** Also, I will solve the practice problems that you have to submit weekly in class. You are also responsible for any announcement or instructions given in class (this may include instructions for tests). **Tentative course schedule is listed at the end of this syllabus.**

- Exams (Midterms 20% each, Final 30%)

Midterm 1: September 30th, Friday

Midterm 2: November 4th, Friday

Final: December 12th, Monday at 1:30pm - 4pm

**All exams (midterms and final) will be held in our normal classroom.** Midterms will only cover the chapters you have newly learned (not cumulative). Final will include all the material covered in class (cumulative). All exams consist of multiple choice questions and short answer questions.

**There will be no early or make-up exams.** If you have to miss any of the midterms for emergency reasons (i.e. a family or medical emergency), you must inform me before the exam and provide documented accommodation. Only then, I will shift the weight of the midterms to the final exam.

**The final exam cannot be missed under any circumstances.** If you have more than two finals on the same day, you can reschedule all exams after the first two. If the final exam of this course should be rescheduled, you must notify me of this **no later than October 28th, Friday with a proof** that you already have two or more exams before this course's final exam.

**Cheating in any of the exams is unacceptable** Any cheating instances will result in a grade of zero and a report to the Honor Code Council.

- Homework (20%)

There will be 4 homework assignments throughout the semester. **Please make a group consisting of 3-5 students** to do the assignments. I will only accept homework from groups. The due dates will be announced during class. For submission, please scan and upload your homework on Canvas. There will be a section for homework submission under Assignment tab. **Late submissions are not allowed.**

- Weekly Practice Problems (10%)

Every Wednesday, I will upload a worksheet named 'Weekly Practice Problems'. You are **required to turn in your detailed handwritten solutions to these practice problems every week.** This worksheet includes both the practice problems I solved during class for the past week and some

new problems that you can try to solve on your own.

Weekly Practice Problems will be **due weekly on Wednesdays at 2:30PM, before the class starts**. You can turn in your work either by submitting it as a hard-copy in class or by uploading it on Canvas. If you will submit a hard-copy, please be aware that I will not return your work. If you will use Canvas, please scan your handwritten work with a scanner or camera.

These assignments are graded based on completion and effort. To receive full credit, you must submit detailed handwritten solutions for each practice problem from that week. **I will not accept late work; instead, I will automatically drop two lowest grades from your final grade.**

## University Policies

- **Classroom Behavior:** Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. 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 race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

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- **Accommodation for Disabilities:** If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Disability Services website](#). Contact Disability Services at 303-492-8671 or [dsinfo@colorado.edu](mailto:dsinfo@colorado.edu) for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website.
- **Preferred Student Names and Pronouns:** CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.
- **Intellectual Property** All course materials are the property of the instructor and may not be shared with any individual outside of the course at any time for any reason without permission in writing from the instructor. Course materials, including but not limited to lecture presentation slides, assignments, grading rubrics, exams, discussion posts, and recitation activities, may not be posted to any website (e.g., Course Hero or similar sites, social media, etc.). The same applies to any audio or video recordings of lecture or recitation. A violation of this policy will be treated as a violation of the academic integrity policy.
- **Honor Code:** 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. Incidents of academic misconduct will 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 myself and non-academic sanctions (including but not limited to university probation, suspension, or expulsion).
- **Religious Holidays:** Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments, or required attendance. If you have a conflict, please make arrangements with me no later than the first week of the semester.
- **Code of Behavior Policy:** Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty has the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which

stalking, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

**Tentative Course Outline:**

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

<b>Week</b>	<b>Date</b>	<b>Content</b>
<b>1</b>	Aug 22, 24, 26	Course material: 1.1, 1.2, 1.3
<b>2</b>	Aug 29, 31, Sept. 2	Course material: 1.4, 1.5, 1.6
<b>3</b>	Sept. 7, 9	No Class on Labor Day, Course material: 1.7, 2.1
<b>4</b>	Sept 12, 14, 16	Course material: 2.2, 2.3, 2.4
<b>5</b>	Sept 19, 21, 23	Course material: 2.5, 3.1, 3.2
<b>6</b>	Sept. 26, 28, <b>30</b>	Course material: 3.3, Review, <b>Midterm 1</b>
<b>7</b>	Oct. 3, 5, 7	Course material: 3.4, 3.5, 3.6
<b>8</b>	Oct. 10, 12, 14	Course material: 4.1, 4.2, 4.3
<b>9</b>	Oct. 17, 19, 21	Course material: 4.4, 4.5, 4.6
<b>10</b>	Oct. 24, 26, 28	Course material: 4.7, 4.8, 4.9
<b>11</b>	Oct. 31, Nov. 2, <b>4</b>	Course material: 4.10, Review <b>Midterm 2</b>
<b>12</b>	Nov. 7, 9, 11	Course material: 5.1, 5.2, 5.3
<b>13</b>	Nov. 14, 16, 18	Course material: 5.4, 5.5, 5.6
<b>14</b>		