COURSE DETAILS
Title: Economics 6300 Mathematical Methods for Economists
Section: D20 (CNR 12684)
Semester: Summer (July 1, 2019 – August 10, 2019)
Location: Online

INSTRUCTOR
Name: Dr. Ken Danger
Campus Address: Monroe 340, Department of Economics
                2115 G St., NW, Washington, DC 20052
E-mail: Danger@gwu.edu
Telephone: (202) 994 – 6150
Office hours: By appointment

TEACHING ASSISTANT
Name: Je-uei (Jeff) Kuo
Email: jeffkuo@gwmail.gwu.edu
Office Hours: TBD

COURSE DESCRIPTION
Instruction in the mathematical background is required to appreciate and understand the use of mathematics in economic analysis, including multivariable calculus, integral calculus, and linear algebra. Emphasis is placed on techniques for solving systems of equations, unconstrained and constrained optimization, and comparative statics analysis.

PREREQUISITES
None.

TEXTBOOK
You may find that purchasing textbooks at gettextbooks.com will save you money. It’s an alternative to Amazon, among others.


LEARNING OUTCOMES
Students will
- Learn how to apply basic rules of calculus;
- Understand how to locate stationary points, such as maximums, minimums, and inflection points for constrained and unconstrained optimization problems;
- Know how to apply matrix operations;
- Determine the antiderivative of a function and value of a definite integral.
AVERAGE MINIMUM AMOUNT OF INDEPENDENT, OUT-OF-CLASS, LEARNING EXPECTED PER WEEK
In a 15 week semester, including exam week, students are expected to spend a minimum of 100 minutes of out-of-class work for every 50 minutes of direct instruction, for a minimum total of 2.5 hours a week. A 3-credit course should include 2.5 hours of direct instruction and a minimum of 5 hours of independent learning or 7.5 hours per week. In a condensed format, the workload may more than double, such as with a six week or eight week summer course.

GRADING

- Homework assignments 20%
- Midterm 40%
- Final 40%

Final exam: The final is cumulative.

UNIVERSITY POLICY ON RELIGIOUS HOLIDAYS
1. Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance;
2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations;
3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities

For GW’s teaching policies, see http://www.gwu.edu/~academic/Teaching/main.htm

ACADEMIC INTEGRITY
The GW Code of Academic Integrity states: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” Allowing another student to copy your work is defined as cheating under the Academic Integrity code.

For the remainder of the code, see: http://www.gwu.edu/~ntegrity/code.html

SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM

DISABILITY SUPPORT SERVICES (DSS)
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300
The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:
- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals
  
  [http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices](http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices)

**SECURITY**
In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.

**CLASS SCHEDULE**

<table>
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<tr>
<th>Date</th>
<th>Reading</th>
<th>Handout</th>
<th>Assigned</th>
<th>Assignment Due</th>
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<tr>
<td>July 1 – 7</td>
<td>Ch. 2.1-2.6 3.1-3.3; 3.5; 4.1; 5.1-5.6</td>
<td>Notes 1</td>
<td>PS. 1</td>
<td>July 7</td>
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<tr>
<td>July 8 – 14</td>
<td>Ch. A.4.1-4.3</td>
<td>Notes 2</td>
<td>PS. 2</td>
<td>July 14</td>
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<tr>
<td>July 15 – 21</td>
<td>Ch. 7.1-7.3; 8.1-8.3; 9.1-9.2</td>
<td>Notes 3</td>
<td>PS. 3</td>
<td>July 21</td>
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<td>July 22 – 24</td>
<td>Midterm</td>
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<td>PS. 4</td>
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<td>July 23 – 28</td>
<td>Ch. 2.7, Ch. 14.1-14.8</td>
<td>Notes 4</td>
<td>PS. 4</td>
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<td>July 29 – Aug 4</td>
<td>Ch. 17.1-17.3; 17.5; 18.1-18.2; 19.3; 22.1</td>
<td>Notes 5</td>
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<td>Aug 4</td>
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<td>Aug 5 – 7</td>
<td>Ch. 18.6</td>
<td>Notes 6</td>
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<td>Aug 8 – 10</td>
<td>Final</td>
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