Math 160: Introduction to Contemporary Mathematics  Fall 2003
Course Syllabus for Section D (Ref. No. 15800)

Meetings:
Time: MWF 1:30-2:20pm
Room: CW 129

Instructor:
Mikil Foss
Office: 46C Cardwell Hall
Office Hours:
MW 2:30-3:30pm,
TTh 12:30-1:30pm,
or by appointment
Phone: (785) 532-0568
email: foss@math.ksu.edu

Course Description:
This course will provide an introduction to some of the applications of mathematics in today’s society. During the course, we will explore how mathematics is used for investigating real-world phenomena and decision making. The following are some of the topics that will be discussed:

- Graphs and Networks
- The Travelling Salesman Problem
- Various Voting Schemes
- The Apportionment Problem
- Probability and Statistics
- The Mathematics of Finance
- Population Growth

Required Text:

Before each class period, you are expected to read the sections of the text that will be discussed that day.

Instructional Methods:
Classes will consist of a combination of lectures, class discussions, group activities and in-class exercises.

Homework Assignments:
Throughout the semester, homework problems will be assigned from the text about once a week. To receive credit for an assignment, it must be submitted for grading on or before the due date.

Exams:
There will be three in-class exams; these are tentatively scheduled on September 8, October 27, and December 8 (all on Mondays). A cumulative final exam is scheduled on December 17 from 11:50am to 1:40pm in CW 129. Neither books nor notes may be used during any exam.

Make-up Policy:
Make-up exams will be offered for excused absences only. In situations when a university sponsored event conflicts with a scheduled exam, arrangements for a make-up exam must be made with the instructor prior to the exam period. Absences due to an illness or medical emergency will be excused if a formal excuse is provided by the university’s health center. It is your responsibility to discuss an absence and arrangements for a make-up exam with the instructor.
Assessment:
Each of the homework assignments will be graded out of 10 points. In-class exams will be graded out of 80 points each. The final exam will be graded out of a possible 120 points. At the end of the course, students who have earned at least 90% of the total possible points is guaranteed to receive an A for the course; a student who has earned at least 80% of the possible points is guaranteed to receive at least a B; a student with at least 70% of the possible points is guaranteed to receive at least a C; and a student who has at least 60% of the possible points is guaranteed to receive at least a D.

Graded Assignments and Exams:
It is the your responsibility to collect graded assignments and exams during the class period in which they are returned. It is also the your responsibility to maintain a complete portfolio of graded assignments and exams. If the need arises, this portfolio will be used to verify, update, or correct course records, and an incomplete collection of graded work could have a negative impact upon your final grade.

Tentative Schedule:

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<tr>
<th>Week Beginning</th>
<th>Coverage &amp; Other Information</th>
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<tbody>
<tr>
<td>August 18</td>
<td>Chapter 1, pp. 1-20</td>
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<td>August 25</td>
<td>Chapter 2, pp. 32-58</td>
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<td>September 1</td>
<td>Chapter 3, pp. 76-105; no class on Monday</td>
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<td>September 8</td>
<td>Chapter 5, pp. 169-193; Exam 1 on Monday</td>
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<td>September 15</td>
<td>Chapter 6, pp. 206-239</td>
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<td>September 22</td>
<td>Chapter 7, pp. 255-286; last day to drop without a W on Wednesday</td>
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<td>September 29</td>
<td>Chapter 8, pp. 298-313</td>
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<td>October 6</td>
<td>Chapter 21, pp. 759-787</td>
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<td>October 13</td>
<td>A Model for Stock Derivative Pricing; no class on Monday</td>
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<td>October 20</td>
<td>Chapter 23, pp. 821-848</td>
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<td>October 27</td>
<td>Chapter 12, pp. 407-430; Exam 2 on Monday; last day to drop on Sunday</td>
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<td>November 3</td>
<td>Chapter 13, pp. 438-467</td>
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<td>November 10</td>
<td>Chapter 14, pp. 475-498</td>
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<td>November 17</td>
<td>Chapter 15, pp. 507-536</td>
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<td>November 24</td>
<td>Chapter 16, pp. 544-584; no class on Wednesday and Thursday</td>
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<td>December 1</td>
<td>Chapter 16, pp. 544-584; Chapter 17, pp. 592-625</td>
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<td>December 8</td>
<td>Chapter 17, pp. 592-625; Exam 3 on Monday; no class on Friday</td>
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Final Exam on December 17 from 11:50am to 1:40pm in CW 129

Boilerplate:
Plagiarism and cheating are serious academic offenses and may be punished by failure on the exam, paper, or project, failure in the course, and/or expulsion from the University. For more information refer to appendix F in the faculty handbook:

http://www.k-state.edu/academicservices/fhbook/fhxf.html.

In this class you are allowed and even expected to work together unless otherwise informed. You will be required to sign an honor pledge for any work on which you are not to collaborate.

If you have any condition such as a physical or learning disability, which will make it difficult for you to carry out the work as I have outlined it or which will require academic accommodations, please notify me in the first two weeks of the course.