MAT 1000, Mathematics in Today’s World  
Winter, 2007  
Sections 001, 003, 005 (calls 241833, 25012, 25014)

This course is taught in the “lecture-quiz” format. All students attend the lectures at 11:45 a.m. – 12:40 p.m. on Mondays and Wednesdays in 146 Deroy Auditorium, and in addition, two meetings of the discussion sections on Tuesdays and Thursdays.

Lecturer: Daniel Frohardt
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Office hours: Tuesday 11 – noon  
Wednesday 10:30 - 11:30  
Thursday 10 - 11  
or by appointment.
Office Phone: 577-2499

Quiz Instructor: Minnie Mayes
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Office Hours: TBA  
Phone: 577-9160  
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Website: http://www.math.wayne.edu/~danf/1000

Overview: This is a mathematical literacy course. The objective is to understand some of the mathematics that plays an important role in modern society. The emphasis will be on conceptual understanding. Computations will play a supporting role. During the first part of the semester we will focus on data analysis, with an introduction to statistics. We will study social choice and decision making, with an analysis of possible voting systems, during the second part of the course.

Prerequisite: In order to stay in this class, each student must have either (1) obtained a passing grade in MAT 0993 or (2) had a sufficiently high score on the WSU Mathematics Placement Test within the past two semesters. This prerequisite for the course is of great importance and will be enforced.


Material Covered: We will cover Parts II (Chapters 5, 6, 7, 8) and III (Chapters 9, 10, 11) of the text. We will cover most topics in most chapters, but not all topics in all chapters.
Other supplies
You will want to have a calculator that can compute two variable statistics. If you don’t already own such a calculator, you should either borrow one for the semester or consider buying a TI-30X IIS. The WSU Bookstore sells them for under $20, and you may well be able to get one more cheaply elsewhere.

Classroom
146 Upper Deroy Auditorium Monday, Wednesday, 11:45 AM - 12:40 PM

Attendance
We will take attendance at all class meetings, both the lecture sessions and the discussions sessions. If you are unable to attend one of the class sessions, you should inform the instructor for that session of the reason for your absence. You should also check with a friend from the class to be sure you are aware of the important points covered during the class. Students who miss more that 6 class meetings during the semester will be penalized, with escalating penalties.

Homework
Homework will be a significant part of this course. The assignments will be posted on the web at http://www.math.wayne.edu/~danf/1000/hw
The homework will be discussed during the discussion sessions.
We will collect homework from time to time during the semester. If you find an occasional assignment difficult, you should be sure to show that you have made a good faith attempt to complete it.

Worksheets
There will be a worksheet during most of the discussion sessions. On these worksheets, you are encouraged to work in a group with other students, consult the text, and ask the instructor for help. The main rule for them is to turn in your work by the end of the class period.

Quizzes
There will be five quizzes during the semester, at the end of Chapters 5, 6, 7, 10, and 11. The quizzes will take place in your discussion session. For the quizzes, you must work on your own, but you will be allowed to use a calculator. No cell phones, however.

Midterm Exam
The midterm exam will cover chapters 5–8. It will be held during a lecture session. The rules from the quizzes apply: you must work on your own, with no notes, but you will be allowed to use a calculator.

Final Exam
The final exam will emphasize the material in chapters 9–11, but it will touch on some of the material from the first part of the semester.
Grading
Your grade will be based on the total number of points you accumulate during the semester.

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Worksheets/Homework:</td>
<td>100</td>
</tr>
<tr>
<td>In-class quizzes (5 quizzes, 50 points each)</td>
<td>250</td>
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<tr>
<td>Midterm exam:</td>
<td>100</td>
</tr>
<tr>
<td>Final exam:</td>
<td>150</td>
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<tr>
<td><strong>Total possible:</strong></td>
<td>600</td>
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A student with at least 540 points (90% of the possible total) will receive an A-. A student with at least 480 points will receive at least a B-. A student with at least 420 points will get at least a C-, and a student with at least 360 points will get at least a D-.

Quizzes
The quizzes will be during the quiz sections. Approximate dates for quizzes:

- Thursday, January 25 [Chapter 5]
- Thursday, February 8 [Chapter 6]
- Thursday, February 22 [Chapter 7]
- Tuesday, April 3 [Chapters 9 and 10]
- Tuesday, April 17 [Chapter 11]

Midterm
The midterm exam will be on Wednesday, March 7.

Final exam
The final exam is scheduled for Thursday, April 26, 10:40 AM – 1:10 PM

Please mark this date and time in red on your calendars.