Math 102-Spring 2008

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Office Hours: M-F 10-10:50, M-Th 12-2 and by arrangement

Course Summary

Mathematical Decision Making is mathematics for students who want a better understanding of the real-life mathematics that all people face. It is especially designed for those who have struggled with mathematics in the past. The course stresses the application of mathematics to personal and social issues, rather than stressing the abstract ideas found in many mathematics courses. Like Math 101, this is a project-based course that prepares students to function in real-life situations involving quantitative data.

At CWU, Mathematical Decision Making is often selected to satisfy the "reasoning" requirement for graduation. It is real-world applicable and serves to prepare students for mathematics that will be encountered in other core courses. It also helps to develop a student's ability to reason quantitatively to achieve success in their future careers and personal lives. Basic course goals include:

- Analyzing counting techniques pictorially, algebraically, numerically and graphically.

- Investigating real-world problems with appropriate probability and statistical descriptions.

- Understanding the connection between probability and statistics

- Using technology to help solve problems, experiment, interpret results and verify conclusions.

- Determining the reasonableness of solutions.

- Appreciating that the procedure for solving a problem is as important as the answer.

- Communicating knowledge in both everyday and mathematical language.

Special Points of Interest

- Daily homework is assigned but not collected.

- Homework quizzes will be worth 20 points, and cover assigned homework problems. Daily homework may be used during these quizzes.

- We will have 3 100-point exams and a final worth 150 points. A handwritten 3 x 5 note card may be used on tests.

- The first 3 tests may be retaken.

- Dates for exams and quizzes will be announced in class.

- Three projects will be worth about 50-70 points each.

- Group homework assignments will be worth approximately 125 points.

- Grades are based on total point percentages, calculated to the nearest whole number.

A=93%, B=83%, C=73%, D-63%

A minus grade would be (-3%) and a plus grade would be (+4%)

Necessities

1. Come to class. Math requires a daily commitment to become successful. **We also will be using many supplements to the text.** You will need to be here to understand the material.

2. The required text is Mathematics A Quantitative Reasoning Approach, 4th Edition by Bennett & Briggs

3. You should have a scientific calculator and preferably a graphing calculator

4. Get yourself the help you need. I am more than happy to help you as much as possible. Beyond that, form study groups and take advantage of the math center here on campus.

5. Participate in class discussions. The best learning takes place when students ask questions.

Assigned Problems

Section	Exercises
7A	17-23, 25, 29, 31-55 odd, 57, 61, 65, 66
7B	15-20, 21-59 odd, 67, 68
7E	15-20, 33-49 odd, 54, 57, 63, 66
Conditional Probability GHW	
Random Variables GHW	
Normal Distribution GHW	
7C	17, 20, 23, 24, 29, 36, 27, 41, 42, 45
7D	15-23, 37, 38
5A	19-24, 25-33 odd, 37, 39-50, 51-59 odd
5B	15-30, 37-45 odd, 49, 53, 54
5C	47, 48, 57
6A	17-22, 25, 29, 31-35 odd, 39, 41, 44
6B	17-22, 25, 27, 31, 35
6D	19-22, 25-37 odd,
5E	17-26, 27-33 odd, 37-45 odd, 50

Game Theory and Decision Making GHWs (3)