

UNIVERSITY OF RHODE ISLAND
Kingston, Rhode Island

Syllabus SPRING, 2008

INSTRUCTOR: Donna Passman
E-mail: donp4521@mail.uri.edu

OFFICE HOURS: Tyler 213, TR 12:30 – 2:00pm or by appointment
E-mail is the best way to get in touch with me.

COURSE: MTH 108 – Rodman Hall 002
TTH 11am -12:30 am
Topics in Mathematics (3 credits)

This course provides a survey of mathematical topics with examples from sociology, psychology, education and related fields. A minimum background in mathematics is assumed. Topics include logic, set theory, measure of central tendency and variability, probability, normal distributions, correlation and regression, and finance.

TEXT: Mathematics: A Practical Odyssey
Sixth Edition ISBN 0-495-01273-4

Material will be taken from Chapters 1-4 (see attached schedule)

PRESENTATION: At the beginning of each class, questions on the previous class assignment will be addressed. The remainder of the class will involve lecture, class discussion of new topics and/or tests. My expectation is that all students will be involved in the classroom activities.

EVALUATION:

| | % of grade |
|-------------------------|------------|
| Three hour exams | 60 |
| Final exam | 20 |
| One 5 (five) page paper | 20 |

There will be NO make-ups for a missed exam. The final exam will count twice for a missed exam.

HOMEWORK: Assignments are the odd numbered problems from those sections covered in each class. Additions or deletions will be announced in class. Homework is not collected but is the best way to prepare for classes and exams.

ATTENDANCE: Attendance will be taken at each class. Any student who exceeds 2 absences will be a candidate for withdrawal from the class. I suggest that you attend every class in order to gain as much from the experience as is possible. If you must miss a class, get in touch with a classmate to find out what you missed. This is your responsibility.

TUTORING: In addition to my help in my office, the Academic Enhancement Center in Roosevelt Hall, 4th floor offers very fine tutorial services. **Ask for help the MOMENT you begin to struggle with any of the course material.**

CALCULATORS: Calculators are needed, but may not be shared during exams or quizzes. Speak with me before you purchase one. No other technology can be used during any exam or quiz taken in class. That includes cell phones, PDAs, laptops, etc.
ALL CELL PHONES SHOULD BE OFF OR IN SILENT MODE DURING CLASS.

COURSE OBJECTIVES: Upon successful completion of the course, the student will be able to:

1. Use inductive reasoning or deductive reason to solve a problem.
2. Design a basic truth table.
3. Recognize the standard forms of arguments.
4. Apply DeMorgan's Laws to basic set theory
5. Create a Venn diagram.
6. Apply DeMorgan's Laws to basic set theory
7. Use counting techniques and apply them to combinations and permutations.
8. Determine the Probability of an Event
9. Determine the expected value of a game.
10. Find Measures of Central Tendency; Mean Median and Mode
11. Determine the Range and Standard Deviation for a given Distribution
12. Find Standard (Z-) Scores.
13. Find the correlation Coefficient (r) using Scattergrams.
14. Determine the formula for predicting a y-value given a corresponding x-value using the Equation of the Best-Fitting Line.
15. Apply the concept of compound interest to loans and savings.

Our last class is April 29, 2008.

THE FINAL EXAM FOR THIS CLASS IS Tuesday May 6, 2008.
THE TIME FOR THE EXAM IS 11:30 AM TO 2:30 PM.

TENTATIVE SCHEDULE:

| Day | Activities: |
|-------|---------------------------|
| 1/24 | Introduction; Section 1.1 |
| 1/29 | Section 1.1 continued |
| 1/31 | Section 1.2 |
| 2/5 | Section 1.3 |
| 2/7 | Section 1.4, 1.5 |
| 2/12 | EXAM # 1 |
| 2/14 | Section 2.1 |
| 2/19 | Section 2.2 |
| 2/21 | Section 2.3 |
| 2/26 | Section 2.4 |
| 3/4 | Section 2.5 |
| 3/6 | EXAM #2 |
| 3/11 | Section 3.1 |
| 3/13 | Section 3.2 |
| 3/24 | Section 3.3 |
| 3/26 | Section 3.4 |
| 4/1 | Section 3.5 |
| 4/3 | Section 3.6, 3.7 |
| 4/8 | EXAM # 3 |
| 10/15 | Section 4.1 |
| 4/17 | Section 4.2 |
| 4/22 | Section 4.3 |
| 4/24 | Section 4.4, 4.5 |
| 4/29 | Review, last class |
| 5/6 | Final Exam |

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NOTES: Any student with a documented disability is welcome to contact me early in the semester so that we may work out reasonable accommodations to support your success in this course. Students should also contact Disability Services for Students, Office of Student Life, 330 Memorial Union, 874-2098.

The Academic Enhancement Center houses the University's existing Writing Center and Learning Assistance Program, as well as many other academic support service areas such as tutoring, study groups, and multiple forms of academic assistance workshops. The Center serves students who are seeking academic support as well as those with more advanced academic ability who are interested in helping others. In this interactive learning environment, students can enjoy a cup of coffee, get help or help others with schoolwork, and find individual or group assistance as needed.

THE CENTER IS LOCATED ON THE 4TH FLOOR OF ROOSEVELT HALL IN UNIVERSITY COLLEGE