Math 108 Practical Mathematics
(Topics in Mathematics)
Spring 2013 Online course using Sakai

Contact Information:

Instructor: Dr. Glenn Faubert	**Contact via SAKAI**	**Office:** Lippitt Hall 101H
Email: Use SAKAI messages	**Office Hours:** By appointment.	

Learning Outcomes:
The course is designed to help students learn to think logically and analytically, and to understand the importance and practical applications of math in everyday life, science, and technology.

Course Description:
The online Math 108, Practical Mathematics, is a special topics course that satisfies the general education requirement for math at the University of Rhode Island. The three general educations skills addressed in this class, are *reading complex texts, using quantitative data,* and *using information technology.* The content of the course is intended for students majoring in the liberal arts or other fields that do not have a specific mathematical requirement. This course covers in part the following topics, Management Science, Identification Numbers, Transmitting Information and Cryptography, the Internet, Voting Methods, Data Distributions, and the Mathematics of Money. Prerequisite for this course is basic high school math.

Course Objectives and Goals:
To better appreciate the variety of subjects within mathematics, you will be introduced to some exciting ideas in mathematics that come from a wide variety of disciplines along with real world applications. The course intends to help students think logically and critically about mathematical ideas that are ubiquitous in our society.

Evaluation/Grade:

Description	Contribution to final grade
3 Online Tests	Test average accounts for 40% of grade
10 Homework assignments	Homework average accounts for 25% of grade
3 Short Writing essays	Essay average accounts for 20% of grade
Contributions to discussion forum	Forum average accounts for 15% of grade
	100% total

Grade Table

A (93% - 100%)	A- (90% - 92%)	B+ (87% - 89%)	B (82% - 86%)	B- (79% - 81%)
C+ (76% - 78%)	C (71% - 75%)	C- (68% - 70%)	D+ (65% - 67%)	D (60% - 64%)
F (0% - 59%)	Grades are rounded to the nearest whole percent, then the above table is used.			

Remarks: A grade of “incomplete” can only be given if you are passing the course. You must submit in writing your reasons for requesting a grade of “incomplete.” Your reasons must satisfy both your instructor and the mathematics department chairperson. There will be no individual extra-credit assignments, so please do not ask.

TextBook: **(Students must have textbook by January 23)**

"For All Practical Purposes", (8th edition or 9th edition) by COMAP. Published by W.H. Freeman. There are several options to obtain the textbook for this course. See SAKAI home page. If you own a 9th edition let me know right away so that I can send you an alternate Course outline.

Course Outline:

	Date Topic Covered	**Essays/Tests**	**Read Text**	**8th ed. Homework Exercises to Hand in**	**HW Due Date**
1	**Jan 23 – Jan 31** Urban Services	Class begins Jan 23	Ch.1 all	pp. 22-24 4, 8, 10, 36, 40	Jan 31
2	**Feb 1 – Feb 9** Efficiency		Ch.2 sec. 1-4	pp. 55-63 2ac, 8, 18, 42, 53ad	Feb 9
3	**Feb 10 – Feb 18** Exploring Data	Short writing essay 1 due Feb 16	Ch.5 sec. 1-6	pp. 176-178 6, 8, 14, 20, 22	Feb 18
4	**Feb 19 – Feb 27** Probability	Test 1 due Feb 25 Chapters 1, 2, 5	Ch. 8 sec. 1-3, 5	pp. 275-279 4, 14, 24, 32, 40	Feb 27
5	**Feb 28 – Mar 8** Social Choice		Ch. 9 all	pp. 308-310 2, 10, 16, 20, 22	Mar 8
6	**Mar 9 – Mar 24** Fair Division	Short writing essay 2 due Mar 22	Ch. 13 sec. 1-4	pp. 427-428 2, 4, 12, 14, 18	Mar 24
–	Mar 11 – Mar 17	Spring Break: Nothing is due, a time to catch up, get ahead, or relax.			
7	**Mar 25 – Apr 2** Id. Numbers	Test 2 due Mar 31 Chapters 8,9,13	Ch. 16 all	pp. 527-530 4, 10, 50, 58, 78	Apr 2
8	**Apr 3 – Apr 11** Info. Science		Ch. 17 all	pp. 564-566 4, 8, 22, 30, 58	Apr 11
9	**Apr 12 – Apr 20** Savings Models		Ch. 21 all	pp. 700-705 2, 6, 14, 26, 46	Apr 20
	Apr 21 – Apr 30	Test 3 due April 27, Chapters 16,17,21 Short writing essay 3 due April 30			

REMARK: Almost all of the homework problems I am collecting are the even problems. **You must show all work for full credit. Homework with answers only will be given a zero and sent back ungraded.** You should do a similar odd problem to make sure you understand the homework. You are responsible for understanding the homework problems. I will grade the problems and give the solutions to the even problems. If you need more explanation send me a SAKAI message.

Short Writing Essays:

There will be three short writing essays for this course. Essays must be at least one page in length and no more than two pages (double space, 1-inch margin). The assignments must be submitted by the due date and must be submitted using the Assignments tool in Sakai. DO NOT SUBMIT ASSIGNMENTS VIA EMAILS OR FAXES! I will not accept them. I suggest using a word processor (e.g. Microsoft Word or OpenOffice) for your essay submissions. Essay topics will be posted in Sakai. *The late policy on essays is 50% penalty for late assignments at most 24 hours late.* Sakai knows when an assignment is even one minute late and will mark it as such. Assignments are due at 11:00pm on the due date.

Short Writing Essay grading rubric	
Full credit 30pts (6 out of 6)	(1) No major grammatical or spelling mistakes, (2) well organized, (3) material thoroughly covered, (4) work displays original thought, (5) ideas follow and relate to each other in a logical way, and (6) uses examples or concepts from the textbook.
25pts (5 out of 6) 20pts (4 out of 6)	Most of the points (1) – (6) covered in the full credit, but not as well written and/or contains a few major grammatical/spelling errors.
15pts (3 out of 6) 10pts (2 out of 6)	Displays a decent effort, but misses most of the points (1) – (6) covered and/or contains major grammatical/spelling errors.
9pts – 0pts	Comprehension of material not displayed, and/or major grammatical or spelling problems, little effort made, looks like it was prepared night before or copied from the Internet.

Forums:

You will be required to participate in the discussion groups, i.e. Forums. Topics will be posted as the course progresses. There will be one Forum for each chapter we cover. This is considered class participation and is graded. At the end of a discussion I will grade each student. A student that receives 3pts on each criterion would receive a grade of 6pts for that discussion. Late submissions to forums affects everyone who may want to respond to your post. *Late forum posts will receive a participation grade of zero.* The first post to the forum due at 11:00 pm on each due date. All response posts are due two days after the first post is due.

Forums grading rubric			
Criteria	**3pts**	**2pts**	**1pt**
Responses to questions in first post	Student responds to the posted questions with thoughtful ideas, uses concepts in the text.	Student responds to the posted question in a way that does not clearly use the concepts in the text.	Student responds to the posted question but misses the main idea.
Participation in response posts to other students	Postings encourage and facilitate interaction among members of the online community. Student responds to other postings and posts in a timely manner. Nearly all other students' posts are read.	Postings only marginally interact with or respond to other members of the online community. Insufficiently engaged in the discussion. Student omits reading a significant number of posts.	Postings respond to questions posed by the instructor only. Student reads few of the other students' posts.

Homework:

Homework assignments must be submitted by the due date using the Assignments tool in Sakai. DO NOT SUBMIT ASSIGNMENTS VIA EMAILS OR FAXES! I will not accept them. I suggest using a word processor (e.g. Microsoft Word or OpenOffice) for your assignments. You can also scan and upload handwritten assignments. I will not accept homework without worked out problems. Homework assignments with answers only will be given a zero. I will also give zero points to individual homework problems with no work to support the answer. Almost all of the problems I am collecting are the even problems. You must show the work for full credit. You should do a similar odd problem to make sure you understand the homework. *The late policy on homework is a 50% penalty for late assignments at most 24 hours late.* Sakai knows when an assignment is even one minute late and will mark it as such. Homework is due at 11:00 pm on the due date.

Tests:

Quizzes will be given through Sakai on the dates stated above. Tests will be posted for 7 days and will be timed. You may take the test any time during the 7 day time slot. *Failure to take the test in the given time slot will result in a grade of zero.* No exceptions! No make-ups! SAKAI will not allow tests to be taken late. Last minute testing is a bad idea. (See computer crashes/glitches below)

Academic Integrity:

Cheating is defined in the University Manual section 8.27.10 as *the claiming of credit for work not done independently without giving credit for aid received, or any unauthorized communication during examinations*. Students are expected to be honest in all academic work. The resolution of any charge of cheating or plagiarism will follow the guideline set forth in the University Manual 8.27.10-8.27.20, http://www.uri.edu/facsen/8.20-8.27.html. Online exams must be done independently. Suspicious scores may require additional explanation via email or phone and/or a face to face on campus examination.

Sakai:

Sakai is being used to teach this course. That means you must become familiar with using Sakai. All of the course material can only be accessed through the Sakai course shell. All assignments MUST be submitted through Sakai using the Assignments tool. You can access Sakai at the following web address: https://sakai.uri.edu/portal/ Use your e-campus id and your URI Webmail password (generally not your ecampus password). When you log into Sakai you will see the tap labeled Topics in Mathematics. Click on the tab. If you have many tabs, you might need to click on more to show the current semester tabs. See the Help Desk on how to remove last semester tabs.

Computer crashes/glitches:

Taking an online course requires access to a reliable computer. Due dates will not be extended because of computer problems. Form a back-up plan ahead of time. Start all assignments early. Realize that the first time you do anything new something will go wrong. Plan accordingly!

Time commitment:

If you are not spending an average of 10 hours per week in this class then you are not working up to your potential, and your grade will reflect this. Some students may need to spend more time. You should spread your time out over each week as much as your schedule allows. Math tastes better if taken in sips rather than in gulps. Hard work will be rewarded. I wish you well.