

MAT107

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Prerequisites: This course has a prerequisite of either a 2.0 in MAT098 or an appropriate score on the math placement exam in the last three years. If you have not yet met the prerequisites for this course, you may not stay enrolled in the course.

Textbooks: *Fermat's Enigma* by Simon Singh (You can get this at local bookstores or online for under \$20); *History of Math for the Liberal Arts* by Lawrence Morales. The Singh book is available at the SCCC bookstore. My text will be available electronically if you have a laser printer at home or at work. This text is free.

Required Materials: A scientific calculator, straightedge (ruler), e-mail access, internet access using A RECENT browser, access to a fax-machine (if you will be faxing homework instead of dropping it off at SCCC.)

Course Description: This course is a terminal mathematics course for liberal arts majors. A variety of topics will be covered in a mathematical and historical context. All material and interaction will take place over the Internet. Students will access course materials, assignments, class discussion boards, announcements and other information from the course web site.

Course Outcomes: Students should gain a better understand of mathematics as a human endeavor that has evolved through the centuries. Students should see that cultural and socioeconomic factors have influenced the development of mathematics. Student should gain a greater understanding of common topics such as algebra, equations, geometry, and logarithms through an examination of their historical development. Students should have exposure to new topics in mathematics that they may have not seen before in such areas as statistics, network and graph theory, and number theory.

Methods of Instruction: The primary mode of instruction will be online. Students will be expected to read through assignments in the textbooks as well as any supplemental material posted to the website about various topics in the course. Students will then be expected to use those materials to complete assignments as well as participate in online class discussion, among other things.

Course Content: The focus of this section of MAT107 Online will be the history of mathematics. Don't let that fool you. We will still do plenty of mathematics, using techniques you should already be familiar with, and developing new ones as well. The planned set of topics will be published on the web site once the quarter begins.

Student Assignments: We will have six or seven topics to cover. The class web site has a calendar that will be updated regularly throughout the quarter. Please pay close attention to the calendar on a regular basis for updates.

Topic Assignments Each topic will have the following components.

- *Reading Assignment:* These are questions you answer via WAMAP to insure you have read the topic material needed to do the homework.
- *Online Homework:* These are problems you submit via WAMAP that are graded automatically.
- *Hand-In Homework:* These are problems you submit on paper or via fax and are checked or graded by the instructor.
- *Online Participation:* Every topic will include requirements to post your responses to questions and to other students on the class web site. Please pay close attention to due dates assigned to these posts.
- *Project Progress:* Most topics will include a component of progress on your course research project (see below). These milestones are designed to help you to get the project started and done rather than putting it off until the last minute. They will count as part of your participation score.

Research Project

Each person will be responsible for a final project that will be a Scrapbook on a famous mathematician. This Scrapbook will be sent to the instructor for evaluation. More details will be provided during the first two weeks of class.

Final Exam

There will be at most one exam, the final. It will be open book, open note. You will be required to submit it by a certain time and date to get credit for it.

Other assignments may be given at the discretion of the instructor.

Course Policies:

Grades:

The course grade will be determined by assigning the following approximate weights to each of the following categories. (These weights may be adjusted at the discretion of the instructor.)

Topic Assignments = 60%; Final Project = 30%; Final Exam = 10%

Numeric grades are computed with a linear formula that will be determined at the end of the quarter. A 75% guarantees a 2.0 and a 95% guarantees a 4.0. (All other grades are assigned with a linear formula with these two points determining its equation)

If you want a grade of **I** (Incomplete), it is up to you to make sure you meet the college deadlines for requesting these grades. Incomplete's will only be given under circumstances described in the college catalog. If you stop participating in the class, you will *not* be automatically dropped from the course and you'll receive a 0.0 as a grade. It is *your* responsibility to make sure that you are properly enrolled or de-enrolled in the course. I do not give **NC** grades...withdraw you do not intend to finish the course.

Late Assignments and Makeup Work

- Late homework will not be accepted. If you are faxing in homework, make sure you do it with plenty of time to spare in case of technical difficulties.
- Postings to bulleting boards will not count if not posted by the given deadlines.
- Exams must be submitted by the date and time proscribed. No exceptions.

Participation and Motivation:

There is a widespread myth that online courses are easier than traditional courses. On the contrary, research shows that these courses can be more difficult than traditional courses because they require motivation, persistence, and independence on the part of students. You must not fall behind in any way on this course or it will be hard to catch up again. (I suggest you log in to the course web site once a day for important announcements.) For a traditional 5-credit quarter class, you can usually count on at an average of 10 hours of work outside of class to do well. Hence, 15 hours a week for a course is not considered an unreasonable amount of work. This course is no exception. Expect this course to demand about this much time per week, maybe more while you adjust to the technology or as you adjust to the demands of reading mathematics material on your own and then trying to apply that without the aid of a lecture.

Americans with Disability Act: Students with *documented* disabilities who need course accommodations, have emergency medical information or require special arrangements for building evacuation should contact the instructor within the first two weeks of class.

The instructor reserves the right to make changes to this syllabus if circumstances warrant such change. All changes will be provided to students in writing.