

## History of Mathematics Syllabus

math 320  
3 credits  
bu 106  
mwf - 12:00 noon

### texts:

(1991). dunham, william. *journey through genius: the great theorems of mathematics*. new york: penguin books. (required).

(2008). lewis, s.m. (ed.). *source readings in the history of cosmological thought*. cwu coursepack.

### description:

we will study the foundations of calculus, ending with a brief introduction to the life and works of isaac newton and gottfried w. leibniz. during the course of the quarter you will read and learn some of the great theorems of mathematics, work problems with eudoxus, euclid, cratosthenes, aristarchus, archimedes, kepler, descartes, fermat, and napier to name a few.

this class is designed for prospective teachers of secondary school mathematics. it is taught with the understanding that a grasp of the historical and intellectual context is essential for effective instruction.

there are some links in the left sidebar of this page. take the time to explore what some people in other universities are interested in. there are other possibly useful links back at [my home page](#).

check out the [fall 2008 class calendar](#).

### evaluation:

your evaluation will be based on the following:

- 60% - two midterms
- 30% - final examination
- 5% - notebook
- 5% - boardwork/collected assignments/participation
- 0% -quizzes

the midterms will have two parts: part one will contain a

scott m. lewis  
hertz 225  
phone: 963-1803  
fax: 963-3226  
hours:  
m, w, f 9:00am  
else, by appointment,  
gleefully accepted

### links:


[general history of mathematics](#) (from trinity college, dublin)

[historical timeline](#) (from clark university, worcester, massachusetts)

[aristotle: the four causes](#)

[galileo: letter to the grand duchess](#)

### study questions:

 [as certain as the planetary orbits, pierre simon laplace](#)

 [on the heavens, aristotle](#)

 [chapter study questions](#)

#### **miscellaneous:**

 [homework checklist](#)

 [sample exam questions](#)

variety of problems that we will have worked on during the quarter, part two will consist of the great theorems of mathematics as presented by dunham in *journey through genius: the great theorems of mathematics*. **you must read the text thoroughly and completely in order to have a chance to pass this course.** the final will contain the same two parts plus a part three with essay questions.

*your required notebook must be single-subject (i don't want your math 321 notes), neat and organized, with worked problems in a separate section.* i will not accept anything less. i will collect selected homework assignments and we will have several unannounced, but straight-forward, quizzes to help you see where you stand regarding the content of the course.

if you have any questions or comments, feel free to come by my office or e-mail me at the address below.

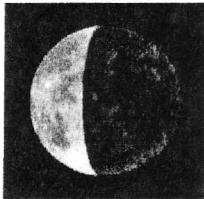
#### **student learner outcomes**

the most important things you learn in school are not going to be measurable, sorry. in fact, the absolute best service a list of 'student learner outcomes' could possibly provide is as a random sample of behavioral objectives. that said, at the end of this course, you will have a reasonable facility (as measured by the evaluation procedures described above) in constructing sound mathematical proofs with a variety of techniques, in reading and understanding difficult source material in the history of science and mathematics, and in identifying and discussing several major themes in the historical development of mathematics.

**no, no, no!**

no late assignments, no early test, no late tests, no make-up tests (including finals ... be there).

CURRENT MOON



Waning Crescent  
31% of Full  
Tue 23 Sep, 2008  
[moon phase info](#)




---

| [post no bills](#) |

---

fall 2008

*scott m. lewis, [slewis@fulbrightweb.org](mailto:slewis@fulbrightweb.org)  
there's no place like home.*