## MA 502-201 — SEMINAR IN SELECTED TOPICS: HISTORY OF MATHEMATICS SPRING 2006

NOTE: This syllabus is not in final form; I may need to make some changes in the future.

#### **INSTRUCTOR:**

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### TEACHING ASSISTANT:

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## SYNCHRONOUS MEETINGS VIA CENTRA:

Orientation Session (Learning to Use Moodle): Thursday, January 12, 7-8 pm. Regular Sessions: Tuesdays, January 17 through April 25, 7-9 pm, with the exception of Tuesday, March 14 (UK's Spring Break).

## ASYNCHRONOUS COURSE MANAGEMENT:

Moodle, via the website http://moodle.math.wvu.edu.

#### COURSE WEBPAGE:

http://www.ms.uky.edu/~lee/historysp06/historysp06.html

#### TEXTS:

- 1. Berlinghoff, W., & Gouvea, F. (2002). Math through the ages: A gentle history for teachers and others. Farmington, MA: Oxton House. ISBN: 1881929213.
- 2. Boyer, C. (1991). History of mathematics (2nd ed.). New York: Wiley. ISBN: 0471543977.
- 3. Dunham, W. (1991). Journey through genius: The great theorems of mathematics. New York: Penguin Books. ISBN: 014014739X.

**TOPICS:** The backbone of the course will be the work by Dunham. We will go through this text in order, and assign correlated readings from the other two texts. Besides understanding the historical origins and development of important mathematics, we will also want to pay attention to the appearance of such mathematics in the K–16 curriculum.

## GRADING:

Presentations — written and oral: 20% Threaded discussion: 5% Synchronous participation: 5% Homework: 25% Midterm (over spring break): 20% Final exam: 25%

## WEEKLY COURSE SCHEDULE:

- Tuesday Begin asynchronous threaded discussion
- Sunday 11 pm Complete asynchronous discussion
- Tuesday 7–9 pm Synchronous session
  - Project presentations from class members (probably one or two)
  - Discussion of reading
  - Follow-up from threaded discussion
  - Discussion of homework
- Friday Submit homework, emailed by 11 pm.

**ASYNCHRONOUS DISCUSSION:** Topics will be posted on the course Moodle site, and participants are expected to make substantive contributions and responses to others' contributions.

**PRESENTATIONS:** One or two presentations will be made by groups of 1–3 course members at nearly every synchronous session, accompanied by a written report. Topics and details on the nature of these presentations will be posted on the course Moodle site.

**READING:** Readings and some related questions will be posted on the course Moodle site, and participants are expected to complete all of the reading before the synchronous session, ready to engage in discussion on the questions.

**HOMEWORK:** Assigned and completed weekly, turned in by email (preferable) or physically mailed. You may discuss the problems with other current class members and with me. However, when it comes time for you to write up the solutions, I expect you to do this on your own. If you receive assistance from someone else, include a written acknowledgment. Such an acknowledgment is a professional courtesy and will not affect your grade.

**EXAMS:** There will be a comprehensive (up to that point) midterm exam assigned on March 10 and due by 11 pm on Sunday, March 19. There will be comprehensive final exam assigned on April 21, and due by 11 pm on Sunday, April 30.

# **IMPORTANT DATES:**

January 10 — Tuesday — Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees.

January 18 — Wednesday — Last day to add a class for the 2006 Spring Semester.

January 18 — Wednesday — Last day to officially withdraw from the University

or reduce course load and receive an 80 percent refund.

February 1 — Wednesday — Last day to drop a course without it appearing on the student's transcript.

February 8 — Wednesday — Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund.

March 6 — Monday — Midterm of 2006 Spring Semester.

March 10 — Friday — Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons.".

March 13–18 — Monday through Saturday — Spring Vacation - Academic Hol-

idays (No classes).

**TUITION:** As usual, ACCLAIM will pay for half of the in-state tuition for the course, and you are responsible for playing the other half. If there are unusual circumstances concerning your tuition and how it will be paid, contact Robert Mayes immediately.