MATH 4033: HISTORY OF MATHEMATICS

Syllabus (Spring, 2011)

Meetings: T-TR, ENG North 514, 2:00-3:15pm

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Office Hours: MWF, MSCS 502B, 2:30-3:30pm (or by appointment)

Text: Mathematical Expeditions: Chronicles by the Explorers by R. Laubenbacher and D. Pengelley Springer-Verlag, 1999 ISBN: 0-387-98433-X (softcover)

ABOUT THE BOOK: The organization of the book has determined the organization of the course; namely, we will follow the history and development of five areas: **Geometry** (Euclid's *Elements* and the discovery of nonEuclidean geometry), **Set Theory** (Infinite sets, cardinal and ordinal numbers), **Calculus** (Calculating areas and tangents), **Number Theory** (Diophantin equations and Fermat's Last Theorem), and **Algebra** (Roots of polynomial equations). It is a very good idea to have the book and to use it.

EVALUATION:

Exams: There will be five in-class Chapter Exams. The last will be during the final exam period and will NOT be comprehensive but cover Chapter 5 (the last chapter covered). Each exam will be 100 points.

Subtotal: 500 points

Homework: On average there will be two-four HW problems per week. HW assigned in week n is due on Tuesday of week (n + 1). Only one problem will be collected and graded. Each HW will count 20 points and we should have a total of 15 HW assignments.

Subtotal: 300 points

Total: 800 points

Final Grade: A (90-100%); B (80-89%); C (70-79%); D (60-69%). If you have these percentages, then you are guaranteed the corresponding grade; however, there will be possibilities to improve your grade by extra credit problems on tests and the possibility of curving at the end of class.

Study guides will be available before each exam and there will be a short in-class review the meeting before exams. An exam may be expected every three weeks.

NOTES:

(1) General University Information is available at:

http://osu.okstate.edu/acadaffr/aa/syllabusattachment-Fall.htm

(2) Changes may be made to this syllabus as course progress dictates. Any changes will be announced in class and (if possible) via e-mail.