Math 311 – Abstract Algebra

Fall 2002

Professor: Gregory Quenell
Telephone: x2720
Email: quenell@mtholyoke.edu

Office: 423 Clapp
Office Hours: Tuesday 10:30 am – Noon
Wednesday 3:00 – 4:00 pm
Thursday 10:30 am – Noon

Venue: The class meets Tuesday and Thursday from 1:15 pm to 2:30 pm and Friday from 2:15 pm to 3:05 pm in 422 Clapp.

Text: Joseph A. Gallian, *Contemporary Abstract Algebra*, fifth edition, Houghton Mifflin, 2002.

Course description: We will begin with the basics of abstract algebra and move on to study group theory in some detail. We will also touch on ring theory, and, if time permits, field theory. Depending on time availability and student interest, we may explore applications of group theory, such as Galois theory, coding theory, crystallographics, and Cayley graphs and Schreier diagrams.

Homework: There will be a problem set each week. Most of the problems will involve proofs or multi-step calculations. Problem set solutions are to be written in complete sentences, and will be graded for presentation as well as correctness.

Quizzes: There will be a ten-minute quiz each week. Quiz problems will generally ask you to state definitions and named theorems, or to carry out simple calculations related to material covered recently in class. There will be no make-up quizzes, but your two lowest quiz grades will be dropped.

Exams: There will be two take-home hour exams and a final exam.

Grading: Your course grade will be computed as follows:

Problem Sets	40%
Quizzes	20%
Hour Exams	20%
Final Exam	20%

Technology: On occasion, we will use a calculator or computer in class. When it is helpful to do so, you are welcome to use a calculator or computer on the problem sets, provided you explain its use in your write-up.

Resources: My office hours are listed above; you are welcome to make appointments to talk with me at other times. You may find some useful information on the course website,

http://www.mtholyoke.edu/courses/quenell/f2002/ma311/index.html.

The Honor Code: You are encouraged to collaborate on problem sets, but only as long as the information flow goes both ways. Each student must write up her own solutions independently. Direct copying from another student's paper will be treated as a violation of the honor code. No collaboration will be permitted on the quizzes, the hour exams, or the final exam.