#### Fall 2009

**Math 370 Mathematics Seminar** M W F 10:20 am. – 11:30 pm. PPHAC 235

Instructor: Dr. Alicia Sevilla Office: PPHAC 217 Telephone: 610-861-1573 (office), 610-867-1787 (home); E-mail: <u>means01@moravian.edu</u>;

**Office hours**: Monday, Wednesday, and Friday, 2 p.m. to 3 p.m.; Thursday, 3 p.m. to 4 p.m.; and by appointment.

**Course Goals:** This course is a Writing Intensive course intended to serve as a capstone for your mathematical studies at Moravian. The successful student will gain a perspective on several fields of mathematics and how they interact; will learn how to read professional mathematical writing, and gain experience in communicating mathematics through different forms of writing, oral presentations and class discussions.

Attendance: During each class meeting, you will be discussing assigned readings, making a presentation, or working with other students on a mathematical problem or activity. For this reason, regular attendance is essential.

#### **Projects, Papers and Presentations:**

- Math History paper: A paper and a 15-minute oral presentation on a history of mathematics topic. The topic will be chosen by you, but must be approved by the instructor.
- Extra Chapter: A 50-minute presentation on a chapter of a textbook a mathematics course that you have taken (beyond first year courses) that was not covered in the course.
- Research articles: A written summary and class presentation of each of two research articles of your choice. The second article should be related to your research project and final paper.
- Research project and final paper: Find a problem in a field of mathematics that interests you and attempt to solve the problem, generalize another person's solution, or in some other way make meaningful progress with the problem. You will write a paper and give a presentation on your research.

**Other Assignments**: There will be several short writing and/or reading assignments on a variety of mathematical topics (you will have the opportunity to choose many of them.)

## **Tentative Dates:**

- September 9 Math History paper topic due
- September 16 Math History paper due
- September 18 Math History oral presentations
- September 21 First research article choice due
- September 25-30 -- Individual conferences about your first research article
- October 7 and 9 30-minute oral presentations about your first research article
- October 21 Research project topic due
- October 26, 28 and 30 Extra Chapter 50-minute presentations
- October 28 Second research article choice due
- November 4 and 6 Individual Conferences about your research project
- November 9 and 11 30-minute oral presentation about your second research article
- November 13 Research project draft due
- December 2 Research paper due
- December 4, 7 and 9 Research project 30-minute presentations

# Grading:

Your grade will be based on class participation and short writing assignments (15%); history of math paper and presentation (15%); Extra Chapter 50-minute presentation (10%); Research article summary and presentation (15% each); Research project (30%)

Accommodations: Students who wish to request accommodations in this class for a disability should contact Mr. Joe Kempfer, Assistant Director of Learning Services for Disability Support, 1307 Main Street (extension 1510). Accommodations cannot be provided until authorization is received from the office of Learning Services.

**Note**: *This syllabus is a guideline for the course. It may be necessary to make changes during the semester. I will announce any changes in class.* 

The Academic Honesty Policy Guidelines, attached, are to be followed. Please read them carefully.

### ACADEMIC HONESTY POLICY GUIDELINES MATHEMATICS COURSES

The Mathematics and Computer Science Department supports and is governed by the *Academic Honesty Policy of Moravian College* as stated in the Moravian College Student Handbook. The following statements will help clarify the policies of members of the Mathematics faculty.

In all homework assignments that are to be graded, you may use your class notes and any books or library sources. When you use the ideas or thoughts of others, however, you <u>must</u> acknowledge the source. For graded homework assignments, you may not use a solution manual or the help, orally or in written form, of an individual other than your instructor. If you receive help from anyone other than your instructor or if you fail to reference your sources you will be violating the *Academic Honesty Policy of Moravian College*. For homework that is not to be graded, if you choose, you may work with your fellow students. You are responsible for understanding and being able to explain the solutions of all assigned problems, both graded and ungraded.

All in-class or take-home tests and quizzes are to be completed by you alone without the aid of books, study sheets, or formula sheets unless specifically allowed by you instructor for a particular test.