

MATH 202 Orientation to the Mathematics Major

1. Catalog Description

MATH 202 Orientation to Mathematics Major 1 unit
CR/NC

Prerequisite: MATH 143.

Career opportunities in the field of mathematics, preparing a field of study, and a survey of departmental facilities and procedures related to research, study and graduation. Credit/No Credit grading only. 1 lecture.

2. Required Background or Experience

MATH 143

3. Learning Objectives

Students should:

- a. Be better informed about career choices in mathematics.
- b. Be able to design a curriculum and plan a strategy to fit their career objectives with the help of the advisor.
- c. Become familiar with faculty interests much earlier to facilitate selection of a senior project advisor.
- d. Graduate earlier and be better-prepared for employment because of informed decision-making.

4. Text and References

- Sterrett, Andrew (ed.), 101 Careers in Mathematics
- Lambert, Stephen and Ruth DeCotis, Great Jobs for Math Majors

5. Minimum Student Materials

Paper, pencils, and notebook.

6. Minimum University Facilities

Classroom with ample chalkboard space for class use, and audiovisual facilities.

7. Content and Method

Lectures with emphasis on clarifying career opportunities, career objectives, and planning the student's upper division program. Other faculty and staff, as well as outside visitors, serve as guest lecturers and resource people in their fields of expertise.

Topics

- a. Introduction to department resources, faculty, the advising process, Counseling and Career Services centers.
- b. The various branches of mathematics and the mathematics curriculum.
- c. Scholarships and financial assistance.
- d. Extra-curricular activities, including Math Club, Math Honor Society, Putnam Exam, Math Modeling Competition.
- e. Career paths and opportunities (teaching, research, scientific and commercial applications, the role of technology).
- f. Undergraduate research opportunities and the senior project.
- g. Graduate school
- h. Developing a career objective and planning an overall strategy to reach it.

8. Methods of Assessment

Written assignments and attendance. Attendance in this class is mandatory. An NC or I grade is appropriate for missing more than one class.

Mandatory assignments include:

- a. A “quarter by quarter graduation plan” of coursework which includes consideration of when mathematics courses are offered, and which tracks are appropriate for the student’s future.
- b. A practice resumé.
- c. A visit to the career fair and short write-up reflecting on the experience.

9. Supplementary Teaching Responsibilities

- a. The assignment of teaching Math 202 is a two-year assignment. The course is taught in spring and fall quarters. Release time is given for this assignment.
- b. The instructor is also the department undergraduate advisor. The undergraduate advisor is automatically on the Curriculum Committee.
- c. Additional office hours are expected and required to advise any and all undergraduates with questions about mathematics courses, and the mathematics major or minor.