Advice for Mathematical Sciences Majors
Regarding General Education and Elective Courses

For freshmen registering for the Autumn 2011 semester – Updated 5/10/2011

The Department of Mathematical Sciences basically offers three different majors:

A. The mathematics major, all options except mathematics education. This includes options in both pure and applied mathematics as well as statistics.
B. The mathematics major with an option in mathematics education, intended for future high school math teachers.
C. The combined major in mathematics and computer science (which requires less course work in mathematics than a regular mathematics major, but also substantial course work in computer science). One could describe this as a "half mathematics, half computer science" major.

For which courses you should register depends partly on the major you choose.

All Mathematical Sciences Majors: The first mathematics course required for your major is Calculus I (M 171). Based on your performance on the Mathematics Placement Exam, sometime in June you will be pre-registered for Calculus I or some other appropriate lower-level mathematics course (for example Intermediate Algebra or Precalculus). In some cases, however, you might want to change your pre-registration (during a Summer Orientation or GEAR Online) to a different mathematics course:

- If you took AP Calculus in high school and are confident in your mathematics background, consider changing your registration to Calculus II (M 172).
- If you earned a score of 3 or higher on the Advanced Placement Calculus AB Exam, you should change your registration to Calculus II (M 172).
- If the Math Placement Exam placed you into Precalculus (M 151) but you are confident in your mathematics background, consider changing your registration to Calculus I (M 171).

Registration advice depending on your specific major:

A. Mathematics Majors (except Mathematics Education Majors): During your freshman year, take at least some of the following courses:
   a. Two courses from the following areas: astronomy, biology, chemistry, computer science, economics, forestry, geosciences, management, and physics.
   b. As a mathematics major, you must either take two semesters of a foreign language, or certain computer science courses. Begin taking courses to fulfill this requirement during your freshman year. If you decide to take computer science courses, proceed as follows: If you already have programming experience, take CSCI 135 (Fundamentals of Computer Science I). If you do not yet have programming experience, take CSCI 100 (Intro to Programming).
   c. Otherwise, fill your schedule with general education courses.

B. Mathematics Education Majors: During your freshman year, take at least some of the following courses:
   a. PSYX 100S (Intro to Psychology) – this is a required course for which you should be pre-registered sometime in June.
   b. COMM 111A (Intro to Public Speaking) and NASX 105H (Intro to Native American Studies). These courses are not required, but strongly recommended.
   c. If you tested out of WRIT 101, we recommend that you take one of LIT 110L (Intro to Literature) or LIT 120L (Poetry).
   d. One or two general education science courses from the following areas: astronomy, biology, chemistry, computer science, geosciences, and physics. One of them should have a lab.

C. Combined Mathematics/Computer Science Majors:
   a. Based on your programming experience, you should be pre-registered during June for an appropriate computer science course. Otherwise, if you already have programming experience, take CSCI 135 (Fundamentals of Computer Science I). If you do not yet have programming experience, take CSCI 100 (Intro to Programming).
   b. You should also be pre-registered for CSCI 106 (Careers in Computer Science) – otherwise, sign up for it.
   c. During your freshman year, try to take COMM 111A (Intro to Public Speaking). Beyond this, fill your schedule with general education courses.