MAT SCE Senior Capstone Experience

The Senior Capstone Experience in mathematics consists of two components:

• senior thesis and oral presentation

   and

• solution and oral presentation of six approved problems or equivalent

Each major will research and write a senior thesis with the supervision of a faculty member and will make an oral presentation on the thesis at a departmental seminar. Each major should have a thesis topic selected and approved by the end of his/her junior year.

Capstone problems may be selected from a departmental list of approved problems or from current issues of the following journals: Mathematics Magazine, The American Mathematical Monthly, The College Mathematics Journal, Math Horizons, The AMATYC Review, SIAM Review, Journal of Recreational Mathematics, and School Science and Mathematics. Students may also earn credit for problems solved while participating in teams in the annual ACM Programming Contest or the COMAP Mathematical Contest in Modeling. A maximum of three such problems may be credited toward the six required capstone problems. The department strongly recommends that each major complete at least two capstone problems by the end of his/her junior year. Capstone problem credit may also be earned for the oral presentation of the review of an approved scholarly paper in Mathematics. Papers may be chosen from the journals mentioned above as well as from other sources after consultation with a faculty member from the department.

Weekly seminars of the majors and faculty in the department are scheduled to provide information about careers, graduate school, thesis topics, and research areas, as well as to enable each major to make presentations of problem solutions and to make the required presentation on the thesis.

The Senior Capstone Experience in mathematics is graded as Pass, Fail, or Honors.