

COMPUTATIONAL AND APPLIED MATH & STATISTICS (CAMS)

CAMS 210 Topics in Computational and Applied Mathematics and Statistics (3 Credits)

A treatment of topics of interest not routinely covered by existing courses. Material may be interdisciplinary, incorporating computational and applied mathematics and/or statistics. This course may be repeated for credit with permission of the instructor.

Prerequisite(s): MATH 111 or MATH 131

CAMS 400 Senior Seminar in Computational and Applied Mathematics and Statistics (3 Credits)

This course gives a guide through the research process in the mathematical and statistical sciences. Each student will choose an appropriate, semester-long research topic. Students will then give several project presentations, give feedback on others' presentations, and will turn in a final paper. CAMS 400 should be taken during the senior year and satisfies the COLL 400 requirement. Mathematical maturity is needed and is typically indicated by having completed at least one core course in either the Mathematical Biology or the Applied Statistics track in the CAMS major.

College Curriculum: C400

CAMS 401 Senior Seminar in Dynamical Systems (3 Credits)

Dynamical systems theory is widely applicable to biology, engineering, finance, data science, and more. This course offers a guide through the research process in dynamical systems. Special topics in dynamical systems that will be discussed may include chaos, synchronization, spatial pattern formation, stochastic dynamics, and time delay. Students will choose a research topic for the semester. Students will also give several presentations, give feedback on others' presentations, and will turn in a final paper. CAMS 401 should be taken during the senior year and satisfies the COLL 400 requirement.

Prerequisite(s): MATH 302 or MATH 345

College Curriculum: C400

CAMS 495 Honors (3 Credits)

Students admitted to Honors study in CAMS will ordinarily be enrolled in this course during the Fall semester of their senior year. The course comprises: (a) supervised research in the student's special area of interest; (b) an Honors thesis based on a review of the literature and their research; (c) satisfactory performance in an oral examination on the subject matter of the Honors thesis. Note: For College provisions governing the Admission to Honors, see catalog section titled Honors and Special Programs.

CAMS 496 Honors (3 Credits)

Students admitted to Honors study in CAMS will ordinarily be enrolled in this course during the Spring semester of their senior year. The course comprises: (a) supervised research in the student's special area of interest; (b) an Honors thesis based on a review of the literature and their research; (c) satisfactory performance in an oral examination on the subject matter of the Honors thesis. Note: For College provisions governing the Admission to Honors, see catalog section titled Honors and Special Programs.

Prerequisite(s): CAMS 495

College Curriculum: C400