

THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE
FACULTY SENATE

Senate Document Number 6517S
Date of Senate Approval 05/04/17

Statement of Faculty Senate Action:

APC Document 58 (CSCI):

**Delete CSCI 462;
Add new courses, CSCI 280, 480 and 481**

Effective Date: Fall 2017

1. Delete: On page 117, the entry for CSCI 462:

462 Senior Project (1)

A demonstration of in-depth knowledge in one aspect of computer science. Successfully completed projects will meet the departmental requirement for competency in the major. Includes an oral presentation before the department's assembled faculty to demonstrate oral competency. Prerequisite: Permission of instructor and approval by department's Senior Project Committee of a senior project proposal. Additional guidelines for the senior project proposal may be obtained from the departmental secretary. Fall and Spring.

2. Add: On page 116, entry for new course, **CSCI 280:**

280 Computer Science Seminar (1)

Professional development seminar. Exploration of career options including internships, industry, entrepreneurship, interdisciplinary opportunities, research and graduate school. Computer science in society, ethics and security. Interpersonal communication and soft skills for effective teamwork. Prerequisite: grade of C or better in CSCI 202. Fall and Spring.

3. Add: On page 117, entry for new course, **CSCI 480:**

480 Capstone I (2)

Capstone project design. Determining hardware and software requirements. Review of relevant literature and development tools. Students develop and submit an individual capstone project proposal. Prerequisite: CSCI 280; pre- or corequisite CSCI 338. Fall and Spring.

4. Add: On page 117, entry for new course, **CSCI 481:**

481 Capstone II (2)

Capstone project implementation. Students implement the project plan that they developed in CSCI 480. Includes an oral presentation before the department's assembled faculty to demonstrate oral competency. Prerequisite: CSCI 480. Fall and Spring.

Impact: Currently, one faculty member coordinates and reviews all senior project work. A significant amount of the faculty effort -- collecting and reviewing proposals -- occurs in the semester prior to the offering of CSCI 462/472. These changes will facilitate faculty workload distribution and project management on the part of the student. Different faculty will be assigned the capstone sections each semester to offer students a more varied perspective as they complete their projects. CSCI 280, 480 and 481 will all be offered by the same instructor in a given semester. Department faculty not serving as faculty of record with these courses will be expected to serve as project advisors and reviewers. These changes will also explicitly connect proposal deadlines to a course, thereby reducing student confusion. To reduce the impact on students fulfilling requirements in catalogs prior to the Fall 2017, we plan to offer CSCI 472 for one year after our proposed changes take effect.

Rationale: Currently our senior capstone experience is listed as a 1-hour course. In recent years, this project course has been offered as a two hour experience. One-to-two hours do not accurately reflect the amount of student work, namely formally propose a project, conduct a literature review, implement project, write project synopsis, and publicly present work. The current senior project course has a professional development component in which students explore options available to them upon graduation. In the new curriculum, the student learning outcomes from the previous curriculum's CSCI 462/472: Senior Project will be distributed across three courses. The sophomore-junior level CSCI 280, Computer Science Seminar, will provide professional development. Students will consider definitions of ethical conduct in the discipline of computing, explore internship and research opportunities, examine their own after-graduation goals and opportunities, and strengthen oral and communications skills. Students will write proposals and conduct literature reviews in CSCI 480: Capstone I, and their projects will be implemented in CSCI 481: Capstone II. CSCI 338: Software Engineering with its SLO's involving project management and technical writing serves as a pre-or corequisite for CSCI 480 so that capstone projects are less likely to be first experiences in the design, development, testing, and documentation of small-medium scale software applications.