

THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE

FACULTY SENATE

Senate Document Number 6918S

Date of Senate Approval 05/03/18

Statement of Faculty Senate Action:

APC Document 61 (NM): **Add new course, NM 313, Virtual Reality, crosslisting it with CSCI 313**

Effective Date: Fall 2018

1a. Add: On page 251, new course, **NM 313, Virtual Reality:**

313 Virtual Reality (CSCI 313) (4)

Students practice techniques for creating immersive and interactive virtual reality environments, developing, presenting, defending, and improving their work based on formative faculty and peer feedback. Practical experience will be gained with tracking systems, head-mounted-displays, and 3D graphics. Alongside projects, students will complete readings and engage in discussions about virtual reality history and theory. Prerequisites: CSCI 202 or NM 251. Odd years Spring.

1b. Add: On page 112, new course, **CSCI 313, Virtual Reality:**

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Impact: This course can be used as a studio elective for the New Media major and minor and as an elective for the Computer Science major and minor. Current resources restrict the enrollment to twenty students – 10 students from New Media and 10 students from Computer Science. The format is a 4-contact-hour lecture/lab with students dedicating additional time outside of class for project implementation and testing. Each student pair is scheduled access to the VR lab by the instructor. Ken Bogert in Computer Science and Victoria Bradbury of New Media are the primary instructors of this course. Marietta Cameron and Susan Reiser both possess the backgrounds in computer graphics and visualization required to teach the course. This course will be offered each year with New Media offering in odd years Spring and Computer Science in even years Spring. While the computer science curriculum follows a 3 credit hour model, they have agreed to the 4-credit-hour designation to accommodate the New

Media curriculum. The CSCI students may elect to fulfill the 6 hours in CSCI electives with this course and a 2-credit-hour undergraduate research course if they don't take an additional 3-credit CSCI class.

Rationale: As an academic discipline, Virtual Reality (VR) actively offers students the opportunity to engage the intersection of various disciplines such as Computer Science, New Media, Drama, Mathematics, and Psychology. VR worlds already so intrigue prospective students considering UNC Asheville and our current students that many are interested in the techniques and skills required to design these applications. Our students are excited by this course's meticulously planned collaborations between New Media and Computer Science peers. Special topics versions have been offered three consecutive semesters: Spring 2017 (CSCI), Fall 2017 (NM), and Spring 2018 (CSCI). Due the high demand, the course quickly fills each semester.