CSE 460 Animation Capstone

**Credits**
5.0 (3 hrs lecture, 2 hours meetings)

**Lead Instructor**
Barbara Mones

**Textbook**
None

**Course Description**
Apply the knowledge gained in previous animation courses to produce a short animated film. Topics include scene planning, digital cinematography, creature and hard surface modeling, animatics and basics of character animation, and rendering techniques.

**Prerequisites**
CSE 458, CSE 459.

**CE Major Status**
Selected Elective

**Course Objectives**
Students will work together to produce a short animated film using the story-reel, animatic, concept art and signature shots designed and produced in cse459. Students will work on several teams and take on leadership of one of the teams. The production will be required to spend considerable time applying all of the previous skills learned in 456, 458 and 459. Students will need to meet deadlines and work well in a group as every part of the production pipeline will need to succeed in order to create a fully completed film. Students will also create a poster and DVD to present the work that they've completed. Students will take part in screening the film to the campus community.

**ABET Outcomes**
(a) an ability to apply knowledge of mathematics, science, and engineering
(b) an ability to design and conduct experiments, as well as to analyze and interpret data
(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
(d) an ability to function on multi-disciplinary teams
(e) an ability to identify, formulate, and solve engineering problems
(f) an understanding of professional and ethical responsibility
(g) an ability to communicate effectively
(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
(i) a recognition of the need for, and an ability to engage in life-long learning
(j) knowledge of contemporary issues
(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Course Topics

- advanced lighting
- advanced efx
- advanced animation
- advanced shading/texture
- advanced cinematography
- render quality
- meeting deadline
- renderfarm maintenance
- compositing and post production
- poster and DVD design