# COURSE DESCRIPTIONS BY COURSE DISCIPLINE PREFIX

## SGD SIMULATION & GAME DEVELOP

**SGD-112 SGD Design I 3 (2-3) Summer**
**Prerequisites:** None
**Corequisites:** None
This course introduces the fundamentals of simulation and game design. Topics include industry standards and design elements for simulation and games. Upon completion, students should be able to design simple simulations and/or games. (2022 SP)

**SGD-113 SGD Programming I 3 (2-3) Fall**
**Prerequisites:** None
**Corequisites:** None
This course introduces the fundamentals of programming languages and tools employed in simulation and game development. Emphasis is placed on programming concepts used to create simulations and games. Upon completion, students should be able to program simple games and/or simulations.(2022 SP)

**SGD-114 SGD 3D Modeling I 3 (2-3) Summer**
**Prerequisites:** None
**Corequisites:** None
This course introduces the tools required to create three-dimensional (3D) models. Emphasis is placed on exploring tools used to create 3D models. Upon completion, students should be able to create and animate 3D models using 3D modeling tools. (2022 SP)

**SGD-162 SGD 3D Animation I 3 (2-3) Spring**
**Prerequisites:** SGD-214$^{L}$
**Corequisites:** None
This course introduces the fundamental principles of 3D animation used in simulation and game development. Emphasis is placed on a historical survey of 3D animation, aspects of the 3D animation techniques. Upon completion, students should be able to produce 3D character sketches, morph simple objects, create walk and run cycles and develop professional storyboards.(2022 SP)

**SGD-174 SGD Level Design I 3 (2-3) Summer**
**Prerequisites:** None
**Corequisites:** None
This course introduces the tools used to create levels for real-time simulation and games. Topics include level design, architecture theory, modeling for 3D engines, and texturing methods. Upon completion, students should be able to design simple levels using industry-standard tools.(2022 SP)

**SGD-212 SGD Design II 3 (2-3) Fall**
**Prerequisites:** SGD-112[S]
**Corequisites:** None
This course covers the advanced principles of simulation and game design. Topics include advanced design concepts in simulation and game development. Upon completion, students should be able to design an advanced simulation or game. (2006 SP)

**SGD-214 SGD 3D Modeling II 3 (2-3) Fall**
**Prerequisites:** SGD-114[S]
**Corequisites:** None
This course introduces the tools used to create and animate advanced 3-dimensional models. Emphasis is placed on identifying and utilizing the tools required to create and animate advanced 3D models. Upon completion, students should be able to create and animate advanced 3D models using 3D modeling tools.(2022 SP)

**SGD-289 SGD Project 3 (2-3) Spring**
**Prerequisites:** SGD-212[S], SGD-213[S], SGD-214[S], or SGD-285[S]
**Corequisites:** None
This course provides students with the opportunity to create a functional simulation or game with minimal instructor support. Emphasis is placed upon verbal and written communication, skill documentation, professional presentation and user training. Upon completion, students should be able to create and professionally present a fully functional simulation or game.(2009 FA)