ASSOCIATE - GAMING (ASGM)

ASGM-101 Collaborative Game Design - (3 Credits)
This course is an invitation to non-programmers, students of all disciplines, and anyone who enjoys creating enjoyable experiences for themselves and others. Students will have a brief overview of the major developments in gaming, including game history and its influence on culture and business. The structure of this course follows three tracks (Narrative, Mechanics, and Systems), with the aim of cultivation a diverse and growing community of game-designers and players across disciplines. Fostering multidisciplinarycollaborations is a prime focus of this course, using well-established team-building techniques and strategies.

ASGM-102 Game Analysis and Strategy - (3 Credits)
This class provides students with the tools to examine and conceptualize a game's underlying structure. By unlocking how addictive games work, students will gain insights into the nature of risk and reward, incentives, and behavior science.

ASGM-103 Storytelling and Interactive Narrative Design - (3 Credits)
This course highlights the central structural and aesthetic role narrative brings to game design. Stories and roleplaying predate all other art forms, and narrative-based entertainment will continue to evolve alongside every new technology that captivates our imagination. With a special emphasis on roleplaying games and world-building, students will learn the crucial building-blocks of story structure, pacing, and character development; appropriately adapting them to various types of games and technologies.

ASGM-104 Animation and Motion Graphics I - (3 Credits)
This course deals with the fundamental structural issues included in creating motion graphics and animation. Focus is on design for animation using video and graphic design techniques. Topics include storyboard, narration, and various techniques used in the industry.

ASGM-105 3D Modeling and Animation I - (3 Credits)
This course introduces students to computer-aided Three Dimensional design and animation. Topics covered include shaping primitive objects; constructing skeletons for realistic support and movement; as well shading, textures, and simulated physics. Students will conclude the course with the ability to create believable 3D characters and objects.

ASGM-121 Object-Oriented Programming - (3 Credits)
This course covers the fundamental of programming, with an emphasis on object-oriented programming, one of the most popular methods for writing modular and easily extended code for games and other applications. Students will gain an understanding of the wide variety and relative strengths of available programming before focusing on one language in-depth (Python, Java, C, or similar).

ASGM-122 Game Production I - (3 Credits)
This course teaches the core skills for game creation. Students design and build an original playable 3D game. The entire process for game developing is covered from conceptualization through final assembly. Art, concepts, and code are combined to bring to life a unique world of each student's creation.

ASGM-123 Immersive Sound Design - (3 Credits)
The aural environment can be just as beautiful, or just as scary as any 3D environment. The predominance of surround-sound and binaural headphones make sound even more crucial to any interactive experience. Students will learn to mix, combine, and optimize the sound-scape to create immersive experiences that complement interactive design.

ASGM-201 Mobile Gaming - (3 Credits)
In this course, students will create games for web browsers, tablets and smart phones using HTML5, CSS3, and various javaScript frameworks. Students will go through the entire production process from the planning stages to best production practices to testing and delivery.

ASGM-204 Animation and Motion Graphics II - (3 Credits)
This studio course explores the area of advanced motion graphics and animation. The course is designed to move beyond the basics and focus on storytelling, narrative, acquiring technical skills and creation quality work. Students will produce several short motion graphics and animations as well as two longer projects during the course.

ASGM-205 3D Modeling and Animation II - (3 Credits)
This course teaches the methods to create original art in 3D along with techniques to capture objects and people from the real world as scanned datasets for use in virtual environments. The art of motion is applied to the models created through the animation and rigging of characters. Students will also work with motion-captured clips that are edited, blended and then applied to original characters to tell an animated story rendered to a video and acted out within a game.

ASGM-206 Advanced Worldbuilding - (3 Credits)
This is an interdisciplinary seminar focusing on creating believable and compelling artificial worlds for stories and games. Students will examine worldbuilding case studies such as Lord of the Rings and Game of Thrones as they harness linguistics, city planning, cartography, and other disciplines to create their own worlds.

ASGM-207 Serious and Subversive Games - (3 Credits)
This class evaluates the social and psychological qualities of games and simulations in an attempt to push the medium into a new form. Students create games that investigate politics, education, and much more.

ASGM-222 Game Production II - (3 Credits)
Students continue the process of building their own playable 3D game from ideas, to creation, to marketing. Students will learn business models associated with marketing and producing a game, and will learn how to balance consumer demands and financial intelligence with realizing their personal artistic vision. Skills learned in art and coding will be tempered buy an understanding of the industry business model.

ASGM-240 Interactive Media Portfolio - (3 Credits)
This course summarizes the Game Design and Interactive Media program experience and concentrates preparation for the capstone project. The focus is on producing a professional quality portfolio which will quickly exhibit the students' design and technical skills while also exposing them to networking and job searching opportunities.

ASGM-242 Game Production III - (3 Credits)
This advanced course is the capstone of the game production track, where students will bring together all the skills they developed in interactive design, game mechanics, animation, and graphic design to produce digital as well as analog and hybrid games incorporate both software and hardware components. Students will explore the uses of 3D printing and microprocessors such as Arduino and Raspberry Pi.

ASGM-243 Collaboration Studio - (3 Credits)
This is an advanced workshop where students work together to develop, test, and publish complex games, simulations, and interactive training applications. Collaborative techniques are emphasized as students draw on their experience and expertise from previous classes, evolving earlier game concepts and mechanics into marketable products.

ASGM-245 Mobile App Design - (3 Credits)
Mobile apps pose specific challenges as the variety and capability of tablets, phones, watches and other wearable technology expand into new areas and businesses. Students will explore how gesture-and touch-based interfaces can be elegantly implemented without overshadowing their content.