Course Syllabus

Department: New Media

Date: 3/23/14

I. Course Prefix and Number: DIG 210

Course Name: Introduction to Game and Mobile Application Development

Credit Hours and Contact Hours: 3 credit hours and 4 contact hours

Catalog Description including pre- and co-requisites:

Introduction to game and mobile development explores techniques and concepts involved in developing applications for multiple devices on different platforms. This course will build upon the knowledge already gathered in the prerequisite courses and focus the development to current mobile operating systems and web deployment. Students will experience the possibilities and challenges of developing applications, GUI design and games for multiple platforms while gaining an understanding of the challenges and opportunities that a fragmented market provides.

Pre-requisites: CSC164 Web Development for New Media

Relationship to Academic Programs and Curriculum including SUNY Gen Ed designation if applicable:

This course is a requirement for AS New Media degree program.

II. Course Student Learning Outcomes:

Upon completion of the course the participant will be able to:

A. Create applications that follow good GUI design principles for multiple platforms
B. Apply knowledge of current market trends in mobile platforms and games toward their own development
C. Create a simple game from sketch to final product.
D. Create a simple mobile application from sketch to final product.
E. Deploy applications to mobile and web based platforms
F. Apply the process for deploying applications to popular mobile stores
G. Test on multiple devices following the appropriate processes
H. Debug their game or mobile application

College Learning Outcomes Addressed by the Course: (check each College Learning Outcome addressed by the Student Learning Outcomes)

☑ writing ☑ computer literacy
☒ oral communications ☐ ethics/values
☒ reading ☐ citizenship
III. Assessment Measures (Summarize how the college and student learning outcomes will be assessed): For each identified outcome checked, please provide the specific assessment measure.

<table>
<thead>
<tr>
<th>List identified College Learning Outcomes(s)</th>
<th>Specific assessment measure(s)</th>
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<tbody>
<tr>
<td>Reading/critical thinking/computer literacy/information resources/oral communication</td>
<td>Students will complete hands-on projects and testing requiring research and group activities. All students must also present their projects to the class.</td>
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<tr>
<td>Reading/critical thinking/computer literacy/information resources</td>
<td>Written tests and quizzes based on software, scripting and reading assignments</td>
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<tr>
<td>Reading, critical thinking, computer literacy</td>
<td>In class final project will assess reading, computer literacy (scripting) and problem solving skills.</td>
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IV. Instructional Materials and Methods

Types of Course Materials:

Textbook, and various web based tutorials.

Methods of Instruction (e.g. Lecture, Lab, Seminar …):
Lectures, Demonstrations, Discussions, Critique sessions, Hands-on work, In-classes exercises

V. General Outline of Topics Covered:

Concepts of Mobile Application
- Understanding of trending topics gaming
- Learning the design process for developing a mobile applications
- Learning the steps required for deploying to mobile platforms
- Understanding of designing GUI for mobile devices
- Developing a simple application for mobile devices
- Understanding of how to do testing for mobile

Concepts of Gaming
- Understanding of trending topics on gaming
- Learning the difference between 3D real-time render Vs bitmap render
- Learning the process for developing a web or mobile based game
- Learning the steps required for deploying games
- Understand basic gaming principles
- Develop a simple game
- Understanding how to do testing for games

Learning of multiple software packages and processes to put it all together.