DIG1710 – Introduction to Video Game Development Syllabus

Course Overview

This course explores programming as it relates to game development. The students will develop programming skills necessary to create simple game programs in one or more programming languages. This course includes a survey of programming languages that could be used for game development. The student will develop problem solving skills necessary to become competent in the design of computer game programs. (47 contact hours)

Meeting Place and Time

Thursdays 7:00 – 9:40 PM in UP 218 on the Seminole Campus

Academic Department: Digital Media

Dean:Dr. Jonathan SteeleInstructor:Timothy (Tim) ScholzOffice Location:Room 154CPhone:(727) 341-4641

Crossroads Building

Office

Telephone Number: (727)791-5987 **Email:** Please use email within

MyCourses for communication

Alternate Email: scholz.timothy@spcollege.edu

Required Text

There is no required text for this course however. We will be using online resources and tutorials from various resources.

Required Software

Unity Personal (Free) https://store.unity.com/

YoYo Games Gamemaker Studio

https://www.yoyogames.com/

Resources

Resources also available at SPC Campus Learning Support Commons and Libraries.

http://www.spcollege.edu/tutoring/

Major Learning Outcomes

- 1. The student will explore game programming languages.
- 2. The student will demonstrate the ability to create, debug and run computer programs.
- 3. The student will analyze various programming languages used in industry to create computer games.
- 4. The student will become familiar with game development techniques used in the industry.

Important Dates

Please refer to calendar below for important add/drop dates for this course!

Academic Calendar: http://www.spcollege.edu/calendar/

Financial Aid: http://www.spcollege.edu/getfunds/

Course Schedule

Please refer to "Course Content" tab in MyCourses for current course schedule.

Start and Maintain a Digital Portfolio

As a future professional in the field, potential employers or clients will expect you to have a professional portfolio. They want to see a visual representation of your knowledge, skills, and achievements. You can begin developing your professional portfolio, from your very first DIG class. Start your portfolio today by accumulating pieces from these classes. As you move through your DIG coursework, retain the best pieces you have created. Portfolio pieces can include just about anything, but you want to incorporate your best work here. Be sure to keep your work so that you can accumulate enough pieces for an outstanding professional portfolio at the end of your academic program.

Behance

A portfolio can be digital, physical or both. For a digital portfolio you may want to use a service such as Behance.

What is Behance?

Behance is a free online portfolio platform for creative professionals across multiple disciplines. Behance is not a backup system, but a place to show your work.

How do I create a portfolio on Behance?

Creating a portfolio on Behance is free.

Just follow these steps:

- Visit <u>www.behance.net</u>
- Click on the 'Sign Up' link in the upper right hand corner of the Behance homepage.
- Create a Behance account with your Facebook, Adobe, Google or LinkedIn user ID information. Or you can sign up using your personal email account.
- Follow the prompts for creating your Behance account.
- Once you have created your account, you can begin uploading pieces to your Behance portfolio

• Here is a 2-minute video that demonstrates how to add pieces to your Behance portfolio. Go to this link to view: https://youtu.be/-OkuoHuM-Cs

Backup Your Digital Pieces

To save your work over a period of time so that you've accumulated enough portfolio pieces, you need a backup plan. The best practice is to store your saved work in at least two places in addition to your computer. That way, if one of your backup sources fails, you will have the second source to rely on.

First, be sure to have on hand an external hard drive of at least 500 gigabytes. That size of drive will ensure that all your work for the next few years can be saved and retrieved from the same place. As of this writing, 5 terabyte drives are available in the market

A second backup resource is a cloud service such as Google Drive, Microsoft One (provided by the college), Apple's iCloud, or Dropbox. Cloud backup will give you the extra safety of off-site storage so that if your computer or external hard drive fail, you will still have those pieces for your portfolio. Most cloud storage services are free and charge a fee if you upgrade to more space.

Critique

As a student of the arts, critiquing peer work is an important skill. By critiquing the work of others, you make use of your critical thinking skills and thereby learn from what others do. A good critique consists of observation and rationale. That is, select at least one thing about the work that you like and explain why or how it works, then select at least one thing that needs improvement and explain why it needs improvement and/or how to make the improvement.

Deadlines

Deadlines are to be met as described in this syllabus. In the "real world" our prospective clients/employers expect us to meet deadlines. If that is an impossibility, you have to communicate with those clients/employers to ensure they understand that you will be late. Inform them of a missed deadline ahead of time and propose a new due date. Remember that you want to be paid for the work that you do!

We practice that same procedure here in our classroom. While it is expected that your work be on time, you must communicate with your instructor in advance of the deadline to request an extension. Propose a new deadline. Your instructor has the final say as to whether they will accept your late work. Here you want a grade for the work you do!

Attendance

The college-wide policy is included in the Syllabus Addendum. http://www.spcollege.edu/central/asa/addendum.htm

Below is an outline of the college's attendance policy:

- Attendance will be taken for the first two weeks of the class to determine if you have been actively participating in the class.
- You need to complete the follow to be considered to be actively participating in the class:
 - ✓ Attending and participating in class

- ✓ Completing Assignments/Quizzes
- If you are not actively participating for the first two weeks, you will be withdrawn from the class with a "W". You will also be denied access to the course on MyCourses.
- At the 60% point of the class, attendance will be taken for the third time to determine that you have been actively participating. This will be determined by the following:
 - ✓ Completion of least 70% of work assigned to date.
- If you are considered not actively participating in the course at the 60% point, you will be
 withdrawn with a "WF". Students are required to withdraw themselves on or before the 60%
 point in the course to receive a grade of "W". The final date for voluntary withdrawal is
 published in the academic calendar. This date varies for dynamically dated, express and
 modmester courses.

NOTE - Your instructor will not be able to withdraw you from the class. It is your responsibility. If a student wishes to withdraw after the 60% point they will receive a "WF" grade.

Grading

| Topic | Points |
|---|--------|
| In Class Participation | 100 |
| 2D Game Programming in GameMaker Studio | 300 |
| 2D Game Programming in Unity | 300 |
| 3D Game Programming in Unity | 900 |
| Final Project | 200 |
| Total | 1,800 |

Final grade will be the percentage points earned out of the 800 total points available.

A >= 90% B >= 80% C >=70% D >= 60 % F < 60%

Homework Policy

If there are problems with completion of the assignment by the appointed date, the student must discuss the matter with the instructor PRIOR to the due date. See each weeks folder for specific due dates.

Each week the Drop Boxes will detail format and submission instructions. Ensure that you review these instructions prior to submitting attached documents.

It is the student's responsibility to follow the schedule of class assignments.

Late work will not be accepted, graded, or reviewed unless permission is granted PRIOR to assignment due dates. In the event an emergency occurs, please contact me regarding college policy for submitting documentation.

You will need access to Microsoft Word and PowerPoint for this class. All SPC campus libraries have these programs loaded on their computers.

Submissions are part of your grade and proof of attendance. Failure to post to the drop box weekly will count as an absence. If you do not post each week during the first two weeks of class you may be dropped for non-attendance.

Student Survey of Instruction

The student survey of instruction is administered in courses each semester and is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

SYLLABUS ADDENDUM

In the event that topics listed in this addendum also appear in your syllabus, please note that you should rely on the addendum information as this information is the most current.

Emergency Preparedness

In the event that a hurricane or other disaster causes closure of St. Petersburg College facilities, you may be provided the opportunity to complete your course work online. Following the event, please visit the college web site for an announcement of the College's plan to resume operations.

This syllabus is currently available in MyCourses for your convenience.

Log in to MyCourses to confirm that you have access, reporting any difficulty to the SPC Student Technical Support Center at 727 341-4357 or via email at Onlinehelp@spcollege.edu.

IMPORTANT COLLEGE POLICY REGARDING COURSE DROP/ ADD PERIOD AND AUDIT INFORMATION

Students CANNOT add a course following the 1st day the class meets prior to the second class meeting. Students CAN drop a course through Friday of the first week of classes and be eligible for a refund. Except by appeal to an associate provost, students may not change from credit to audit status after the end of the first week of classes. Online classes may be added through the standard drop/add period for that course.

GRADING AND REPEAT COURSE POLICIFS

State policy specifies that students may not repeat courses for which a grade of "C" or higher has been earned except by appeal to an associate provost. Students may repeat a course one time without penalty. On the third attempt, students will pay the full cost of instruction. In addition to any required lab or special fees, the full cost of instruction rate for 2011-2012 is \$352.29 per credit hour. In addition, on the third attempt students may NOT receive a grade of "I," "W," or "X," but must receive the letter grade earned. The grade on the final last attempt with the exception of a "W" grade will be the grade that will be calculated into the overall grade point average. (Developmental courses do not average into the grade point average).

ATTENDANCE/ACTIVE PARTICIPATION/WITHDRAWAL POLICIES

Faculty will publish their own participation/attendance policies in their syllabi. Instructors will verify that students are in attendance during the first two weeks of class. Students classified as "No Show" for both of the first two weeks will be administratively withdrawn from any class which they are not attending. The student's financial aid will be adjusted based on their updated enrollment status. If a student is administratively withdrawn from a class because they were a "No-Show" during the first two weeks of class, financial aid will not pay for the class and the student will be responsible for paying for that class.

Students who are not actively participating in class as defined in an instructor's syllabus will be reported to the Administration during the week following the last date to withdraw with a "W" (as posted in the academic calendar on the college's web site). A grade of "WF" will be assigned to students who are not actively participating during the week following the last day to withdraw with a W grade.

Students will be able to withdraw themselves at any time during the term. However, requests submitted after the last date to withdraw with a "W" (see academic calendar) will result in a "WF." Students and instructors will automatically receive an email notification through their SPC email address whenever a withdrawal occurs.

Withdrawing after the "Last Date to Withdraw with a Grade of 'W'" can have serious consequences. If the student withdraws from a class after the deadline posted in the academic calendar, the student will receive a final grade of 'WF,' which has the same impact on the student's GPA as a final grade of "F." A "WF" grade also could impact the student's financial aid, requiring repayment of financial assistance. Students should consult with an academic advisor or financial assistance counselor prior to withdrawing from a class.

FEDERAL GUIDELINES RELATED TO FINANCIAL AID AND TOTAL WITHDRAWAL FROM THE COLLEGE

The U.S. Department of Education requires students who completely withdraw prior to the 60% point of the term and who receive Federal financial aid i.e., Federal Pell Grant, Federal Academic Competitiveness Grant (ACG), Federal Stafford Loan, and/or Federal Supplemental Educational Opportunity Grant SEOG--to repay a portion of their financial aid.

Students considering a withdrawal from all classes before the published withdrawal date should consult a financial assistance counselor to understand their options and the consequences of the total withdrawal. For further information regarding this policy and other financial assistance policies we encourage you to visit our website at: www.spcollege.edu/getfunds

COLLEGE LEVEL ACADEMIC SKILLS (CLAS) GRADUATION REQUIREMENTS

College Level Academic Skills

DUAL ENROLLMENT, EARLY ADMISSIONS, & EARLY COLLEGE STUDENTS

A Dual Enrollment, Early Admissions, or Early College student may not withdraw from any college course without permission from the Early College/Dual Enrollment office. Withdrawal from a course may

jeopardize the student's graduation from high school. The Dual Enrollment office can be reached at 727 712-5281 (TS), 727 791-5970 (CL) or 727 394-6000 (SE). www.spcollege.edu/central/de/index.htm

ACADEMIC HONESTY

It is your responsibility to be familiar with St. Petersburg College's Academic Honesty policies and the consequences of violations. There is no tolerance for any form of academic dishonesty. Discipline can range from a zero on a specific assignment to expulsion from the class with a grade of "F" and the possibility of expulsion from the college. Note that copying/pasting published information without citing your sources, whether the information is from your textbook or the Internet is plagiarism and violates this policy. Even if you slightly change the words from an outside source, the ideas are someone else's so you still have to cite your sources. Cheating, plagiarism, bribery, misrepresentation, conspiracy, and fabrication are defined in Board Rule 6Hx23-4.461.

Student Affairs: Academic Honesty Guidelines, Classroom

Behavior.www.spcollege.edu/webcentral/catalog/current/stu_affairs_honesty.htm

Copyrighted material within this course, or posted on this course website, is used in compliance with United States Copyright Law. Under that law you may use the material for educational purposes related to the learning outcomes of this course. You may not further download, copy, alter, or distribute the material unless in accordance with copyright law or with permission of the copyright holder. For more information on copyright visit http://www.copyright.gov.

STUDENT EXPECTATIONS

All electronic devices including computers, cell phones, beepers, pagers, and related devices are to be silenced and/or turned off unless they are required for academic purposes. Any use of these devices (including texting) for non-academic purposes is a violation of College Policy and subject to disciplinary action.

Students may be required to have discussions of class assignments and share papers and other class materials with instructors and classmates via chat rooms and other mechanisms. Due to the potential piracy of students' materials, the College is not responsible for student work posted on the Internet (outside of the college's Learning Management System, currently MyCourses).

Each student's behavior in the classroom or online is expected to contribute to a positive learning/teaching environment, respecting the rights of others and their opportunity to learn. No student has the right to interfere with the teaching/learning process, including the posting of inappropriate materials on chatroom or Web page sites.

The instructor has the authority to ask a disruptive student to leave a classroom or lab. The instructor may also delete posts or materials from an online or blended class and/or take disciplinary action if disruptive behavior continues.

ONLINE STUDENT PARTICIPATION AND CONDUCT GUIDELINES

The practices of courtesy and respect that apply in the on-campus classroom also apply online. Any discriminatory, derogatory, or inappropriate comments are unacceptable and subject to the same disciplinary action applied in courses offered on campus.

EMERGENCY PREPAREDNESS

The college website at www.spcollege.edu is the official source of college information regarding the status of the institution. Other important information will be communicated via SPC Alert, local media outlets, and the college toll free number 866-822-3978. All decisions concerning the discontinuation of college functions, cancellation of classes, or cessation of operations rest with the President or his/her designee.

In the event that a hurricane or other natural disaster causes significant damage to St. Petersburg College facilities, you may be provided the opportunity to complete your course work online. Following the event, please visit the college Web site for an announcement of the College's plan to resume operations.

Students should familiarize themselves with the emergency procedures and evacuation routes located in the buildings they use frequently.

Located in each classroom is an Emergency Response Guide (flip-chart) that contains information for proper actions in response to emergencies. Students should be prepared to assess situations quickly and use good judgment in determining a course of action. Students should evacuate to assembly areas in an orderly manner when an alarm sounds or when directed to do so by college faculty or staff or emergency services personnel. Students may access additional emergency information by going to www.spcollege.edu/security. In face to face courses your instructor will review the specific campus plans for emergency events.

CAMPUS SAFETY AND SECURITY

For information on campus safety and security policies please contact 727-791-2560. If there are questions or concerns regarding personal safety, please contact the Provost, Associate Provost, Campus Security Officer, or Site Administrator on your campus. www.spcollege.edu/tsc/security.htm

SEXUAL PREDATOR INFORMATION

Federal and State law requires a person designated as a "sexual predator or offender" to register with the Florida Department of Law Enforcement (FDLE). The FDLE is then required to notify the local law enforcement agency where the registrant resides, attends, or is employed by an institution of higher learning. Information regarding sexual predators or offenders attending or employed by an institution of higher learning may be obtained from the local law enforcement agency with jurisdiction for the particular campus by calling the FDLE hotline (1-888-FL-PREDATOR) or (1-888-357-7332), or by visiting the FDLE website at http://offender.fdle.state.fl.us/offender/homepage.do

ACCESSIBILITY SERVICES

This course is designed to be welcoming to, accessible to, and usable by everyone, including students who are English-language learners, have a variety of learning styles, have disabilities, or are new to online learning. Be sure to let me know immediately if you encounter a required element or resource in the course that is not accessible to you. Also, let me know of changes I can make to the course so that it is more welcoming to, accessible to, or usable by students who take this course in the future.

If you have documentation of a disability or feel you may have a disability:

St. Petersburg College recognizes the importance of equal access to learning opportunities for all students. Accessibility Services (AS) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations. Students registered with AS, who are requesting accommodations, are encouraged to contact their instructor by the first week of the semester. Students who have, or think they may have, a disability (e.g. learning disability, ADD/ADHD, psychiatric, medical/orthopedic, vision, and/or hearing), are invited to contact the Accessibility Coordinator (AC) that serves your campus for a confidential discussion. To find your AC for your specific campus, please go to the college-wide Accessibility Services website: https://www.spcollege.edu/accessibility

COLLEGE CALENDAR

www.spcollege.edu/calendar/

M.M. BENNETT LIBRARIES

www.spcollege.edu/central/libonline/

CAREER DEVELOPMENT SERVICES

www.spcollege.edu/Central/Career/OCDS/index.shtm

INTERNATIONAL STUDENT SERVICES

www.spcollege.edu/central/international/

LEARNING SUPPORT COMMONS (Tutorial Services)

www.spcollege.edu/tutoring/

SPC VETERAN AFFAIRS

www.spcollege.edu/veterans/