HOUSTON COMMUNITY COLLEGE

Digital Gaming and Simulation

GAME 1379 - Introduction to Game Programming

Course Syllabus

"Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please not the professor if you are comfortable in doing so."

Tell us how you are doing so we are ready for you when classes start:
www.hccs.edu/harveystudentsurvey

"At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HC Campus Carry web page at http://www.hccs.edu/district/departments/police/campus-carry/."

Semester with Course Reference Number (CRN)	Fall 2017 CRN: 39838
Instructor contact information (phone number and email address)	**Dr. Reni Abraham** (713) 718 – 2067 reni.abraham@hccs.edu (all class related email communication should be done through CANVAS, Inbox)
Office Location and Hours	West Loop (5601 West Loop South, Houston, TX 77081), Room C256 Office hours by appointment.
Course Location/Times	Online
Course Semester Credit Hours (SCH) (lecture, lab) If applicable	Credit Hours: 3 Lecture Hours: 2 Laboratory Hours: 4 External Hours: 0

Total Course Contact Hours	96.00
Course Length (number of weeks)	16 weeks
Type of Instruction	Web Instruction (Canvas)
Course Description:	Examines the role of a programmer in the development of a game and translatio of game design to code. Includes hands-on programming using a high level language.
Course Prerequisite(s)	None
Academic Discipline/CTE Program Learning Outcomes	1. Define and identify terminologies used in the gaming and simulation industry. 2. Demonstrate the use of appropriate tools to develop the assets. 3. Create documentation for game or simulation. 4. Develop assets for game or simulation.
Course Student Learning Outcomes (SLO): 4 to 7	1. Define game programming terminology and syntax. 2. Identify the limitations of programming games. 3. Prepare pseudocode and/or flowchart for a game. 4. Create a game(s) using a high-level programming language. 5. Texas Skill Standards Board (TSSB) 2: Develop Human/Computer Interactions f Games or Simulations 6. Texas Skill Standards Board (TSSB) 5: Develop Documentation for Games or Simulations
Learning Objectives (Numbering system should be linked to SLO - e.g., 1.1, 1.2, 1.3, etc.)	**Define game programming terminology and syntax.** 1. Demonstrates the understanding of programming terminalogy and syntax. **Identify the limitations of programming games.** 1. Demonstrate the understanding of the limitations of programming games. **Prepare pseudocode and/or flowchart for a game.** 1. Create pseudocode and/or flowchart for a game. **Create a game(s) using a high-level programming language.** 1. Develop a game using a high-level programming language. **Texas Skill Standards Board (TSSB) 2: Develop Human/Computer Interactions f Games or Simulations** **2.3** Program sensory feedback for games or simulations. **2.1** Create user interface for games or simulations. **2.2** Program input interface for games or simulations. **2.4** Evaluate user interface for games or simulations. **Texas Skill Standards Board (TSSB) 5: Develop Documentation for Games or Simulations**

	5.4 Create in-code documentation for games or simulations
SCANS and/or Core Curriculum Competencies: If applicable	SCANS **Define game programming terminology and syntax.** **Identify the limitations of programming games.** **Prepare pseudocode and/or flowchart for a game.** **Create a game(s) using a high-level programming language.** **Texas Skill Standards Board (TSSB) 2: Develop Human/Computer Interactions f Games or Simulations** **Texas Skill Standards Board (TSSB) 5: Develop Documentation for Games or Simulations**
Instructional Methods	Web
Student Assignments	**Define game programming terminology and syntax.** Lab Exercises Homework Exercises Readings **Identify the limitations of programming games.** Lab Exercises Homework Exercises Readings **Prepare pseudocode and/or flowchart for a game.** Lab Exercises Homework Exercises Readings **Create a game(s) using a high-level programming language.** Lab Exercises Homework Exercises Readings **Texas Skill Standards Board (TSSB) 2: Develop Human/Computer Interactions f Games or Simulations** Lab Exercises Homework Exercises Readings **Texas Skill Standards Board (TSSB) 5: Develop Documentation for Games or Simulations** Lab Exercises Homework Exercises Readings
Student Assessment(s)	**Define game programming terminology and syntax.** Various assigned readings from textbooks

	In-class discussions Reading and then writing about seminal texts and theories Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay Group and/or individual projects **Identify the limitations of programming games.** Various assigned readings from textbooks In-class discussions Group and/or individual projects **Prepare pseudocode and/or flowchart for a game.** Various assigned readings from textbooks In-class discussions Reading and then writing about seminal texts and theories Group and/or individual projects **Create a game(s) using a high-level programming language.** Various assigned readings from textbooks In-class discussions Reading and then writing about seminal texts and theories Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay Group and/or individual projects **Texas Skill Standards Board (TSSB) 2: Develop Human/Computer Interactions f Games or Simulations** Various assigned readings from textbooks In-class discussions Reading and then writing about seminal texts and theories Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay Group and/or individual projects **Texas Skill Standards Board (TSSB) 5: Develop Documentation for Games or Simulations** Various assigned readings from textbooks In-class discussions Reading and then writing about seminal texts and theories Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay Group and/or individual projects
Instructor's Requirements	• Read all the assigned readings. • Complete the required assignments and assessments. • Ask for help when there is a question or problem. • Keep up with the materials. • **NO** late assignments will be given credit, even if you are absent

	• **NO** makeup on quizzes. **Manage your personal life (work, playing games, etc.) wisely.**
Program/Discipline Requirements: If applicable	• Students are expected **login at least twice a week.** • Students are expected to download the game engine for creating the game(s • Students will be expected to turn in all work with profession quality. • Students will be expected to be self-motivated and enthusiastic about the wo to be completed. • Students will be expected to be encouraging and professional at all times. • If there is a presentation requirement, students will be expected to be in professional attire for all presentations. • Students are expected to respect constructive comments from peers. **TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEC** *Houston Community College is committed to cultivating an environment free fr inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodatic due to pregnancy please contact an Abilities Services Counselor. The Director c EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:* *David Cross* *Director EEO/Compliance* *Office of Institutional Equity & Diversity* *3100 Main* *(713) 718-8271* *Houston, TX 77266-7517 or Houston, TX 77266-7517 or* *Institutional.Equity@hccs.edu*
HCC Grading Scale:	A = 100- 90 — 4 points per semester hour B = 89 - 80: — 3 points per semester hour C = 79 - 70: — 2 points per semester hour D = 69 - 60: — 1 point per semester hour 59 and below = F — 0 points per semester hour FX (Failure due to non-attendance) — 0 points per semester hour

IP (In Progress)	0 points per semester hour
W (Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses.

FINAL GRADE OF FX: Students who stop attending class and do not withdraw themselves prior to the withdrawal deadline may either be dropped by their professor for excessive absences or be assigned the final grade of "FX" at the enc the semester. Students who stop attending classes will receive a grade of "FX", compared to an earned grade of "F" which is due to poor performance. Logging i a DE course without active participation is seen as non-attending. Please note tha HCC will not disperse financial aid funding for students who have never attended class.

Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspensior and satisfactory academic progress.

To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not aff GPA.

Instructor Grading Criteria

Percent	Item
50%	Assignments (Posted on Eagle Online)
40%	Chapter Quizzes (Posted on Eagle Online)
10%	Comprehensive Quiz (Eagle Online)
100%	**Total**

Instructional Materials

- **Starting Out with C++ from Control Structures to** Objects (8th Edition) Tony Gaddis ISBN-10: 0133769399 ISBN-13: 978-0133769395
- **Note book (8.5" x 11") and pencil/pen.**
- Access to PC
- Flash drive and/or External hard drive.

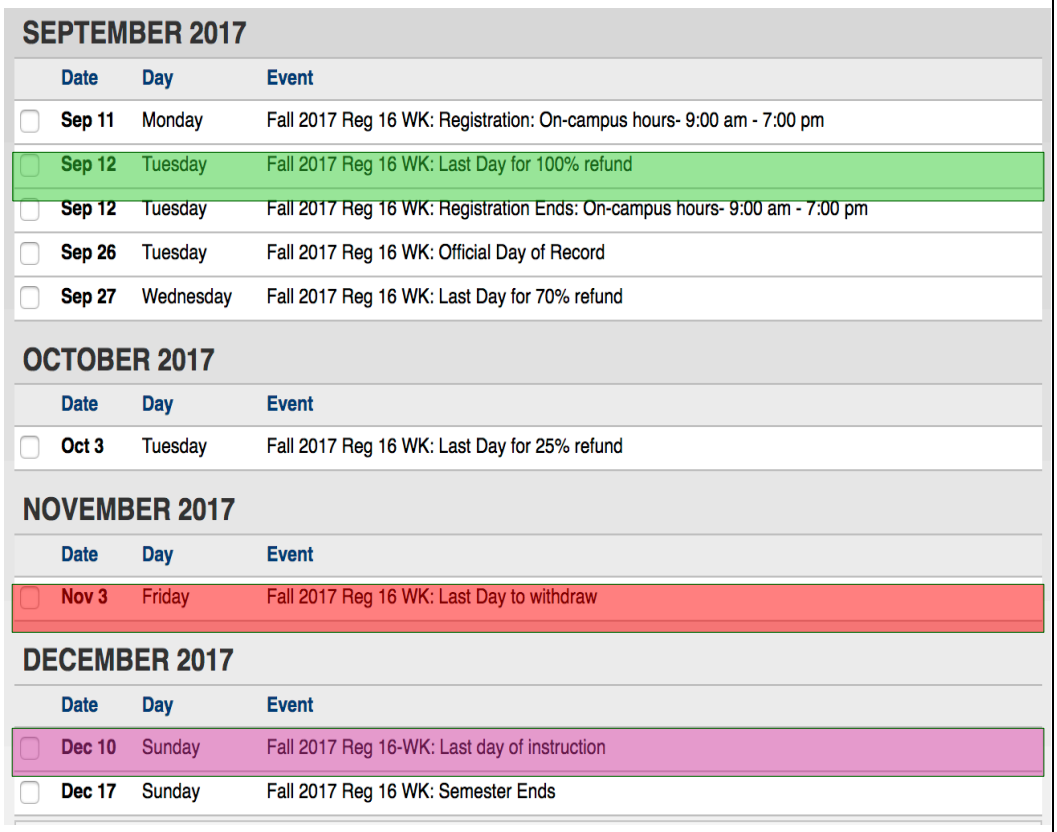
HCC Policy Statement:

Access Student Services Policies on their Web site:

http://www.hccs.edu/district/students/disability-services/student-resources

EGLS3 -- Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

HCC 16-week Calendar	
Final Exam Schedule	**Friday, Dec. 8 – Sunday, Dec. 10, 2017**

Tentative Course Calendar

Week		Topic	Chapter
1	Aug. 28	Inclement Weather Closure	
2	Sep. 4	Inclement Weather Closure	
3	Sep. 11	Introduction to Programming	Ch. 1: Introduction to Computers and Programming
4	Sep. 18	Introduction to C++	Ch. 2: Introduction to C++
5	Sep. 25	**Conference Intro: September 25, 2017 from 1:00pm – 3:00pm**	**On Canvas**
6	Oct. 2	C++ Expressions and User Interactivity	Ch. 3: Expressions and Interactivity
7	Oct. 9	Decision Structures	Ch. 4: Making Decisions
8	Oct. 16	**Conference Decision: October 16, 2017 from 1:00pm – 3:00pm**	**On Canvas**
9	Oct. 23	Decision Structures	Ch. 4: Making Decisions
10	Oct. 30	**Conference Iteration: November 6, 2017 from 1:00pm – 3:00pm**	**On Canvas**
		Iterative Structure	Ch. 5: Loops and Files
11	Nov. 6	Iterative Structure	Ch. 5: Loops and Files
12	Nov. 13	Modular Programming	Ch. 6: Functions
13	Nov. 20	**Conference Modular: November 20, 2017 from 1:00pm – 3:00pm**	**On Canvas**
	Nov. 23 Thanksgiving	Modular Programming	Ch. 6: Functions
14	Nov. 27	Arrays	Ch. 7: Arrays
15	Dec. 4	**GAMING PROJECT SHOWCASE Wednesday, Dec. 6, 2017, 6:00pm-8:30pm ATTENDANCE MANDATORY!!! Professional Attire!!**	
16		**Comprehensive Quiz Friday, Dec. 8 – Sunday, Dec. 10, 2017**	