

**Hagerstown Community College**  
**OFFICIAL COURSE SYLLABUS DOCUMENT**

**COURSE:**

SDE 104 Game Programming and Development I, 3 Credits  
Tuesdays, Thursdays  
10:00 AM – 12:45 PM

**INSTRUCTOR:** David Maruszewski

**SEMESTER/YEAR:** Spring 2016

<b>Instructor Information</b>	Office: ATC 206
E-mail: <a href="mailto:dpmaruszewski@hagerstowncc.edu">dpmaruszewski@hagerstowncc.edu</a>	Phone Number: (240) 500-2361
T 3:00 - 6:00 Th 4:00 - 6:00	Campus Mail Box Number: In ATC 120

**COURSE DESCRIPTION:**

Introduces programming using an event driven programming environment with an emphasis on simulation and game application; includes use of computers for learning games; event driven programming concepts; game hardware integration; usability and algorithm development. Note additional lab time outside of class is required for programming assignments. Laboratory fee required. Prerequisite: SDE 102 or consent of TCS Division.

**TEXTBOOKS:**

Blackman, Sue. *Unity for Absolute Beginners*. New York: Apress, 2014.

**OTHER NEEDED MATERIAL (BRING TO ALL CLASSES):**

Audio Headset  
Calculator  
Pencil (non-mechanical)  
Ruler  
Flash Drive or “Save-able” Media

**STUDENT LEARNING OUTCOMES AND COURSE CONTENT OBJECTIVES:**

- Demonstrate problem solving skills through verbal and written media
- Apply principles of video game design and issues designers face in game creation
- Define variables, functions and random events
- Create narrative environments, stories and characters associated with games
- Define game genres, and the differences between them, with reference to creating each
- Demonstrate game balancing
- Demonstrate fundamentals of gaming and simulation design in the stages of concept and development
- Work productively in a team environment
- Adeptly simulate in 2 dimensions and 3 dimensions
- Analyze, select and apply tools appropriate for a specific solution
- Logically formulate scripts and/or programs to solve problems

- Understand and articulate interactivity in the gaming industry, including the connectivity between computer art and programming
- Apply programming theory in practical applications
- Demonstrate problem solving skills through verbal and written media
- Apply rudimentary Physics and Trigonometry principles

**Total Hours of Coursework:**

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit.

For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

	DIRECT Faculty Instruction In-class	Student Work Out of Classroom
Tests (Study)	15	40
Assignments	15	10
Projects	15	40
<b>Total Hours</b>	<b>45 h</b>	<b>90 h</b>

**ASSESSMENT PROCEDURES:**

Homework: Homework problems will be assigned in class. They will be posted on Moodle should you miss class. The individual homework must have a staple or some permanent binding. If not, ½ of a grade will be deducted from your grade (not paper clips, etc.) All late homework will receive a full grade deduction.

Tests: The student must attend every test. Any person who does not make the test and does not give a valid, documentable excuse ahead of time will be assigned a 0% for the test. If a test is re-given, it will be on a designated date decided during the semester.

Projects: Your project(s) will be given to you during the semester. Late projects will lose 10% per class delivered late. Bring your projects to class every week. There may be time to work on them.

Plagiarism or any other form of taking others’ intellectual property is not allowed in any form. If plagiarism is found in any of your work, you will be given an “F” as a grade for the assignment and possibly for the class, as well. Severity will determine the overall class grade. Please address the HCC’s Academic Policies in the 2009-2010 Catalog for further explanation.

All images and text that has been used from an outside source must have proper references accompanying them. You must reference this using the MLA, APA or Turabian format. If there is beforehand knowledge of a lack of source citing, projects and assignments will not be accepted

for grade. Incorrectly using of others intellectual properties may carry the penalty of an academic review board hearing.

Peer Review: Your final project and other chosen assignments will be done in groups. As part of the group grade, a peer review will be done where the student assesses the other team members' performance(s). These reviews are mandatory. If they are not handed in, your peer review grade will be affected.

Further Notes: Occasionally material may not be covered in class that is outlined in the syllabus. Students will still be required to know the material for tests and homework.

Generally, the class will be run fairly casual. I want to promote your own responsibility in things like attendance and learning. I will probably ask you a lot of questions. However, this is not to drill you but to keep you thinking about the material. Hopefully lectures and labs will be fairly flexible and creative. I'm more concerned with you understanding and developing than how you understand and develop.

#### **EVALUATION METHODS:**

<b>Tests / Papers / Projects</b>	<b>Final Grade Scale</b>
Test I	12%
Test II	12%
Test III	18%
Homework	10%
Peer Review	15%
Project 1	10%
Project 2	11%
Project 3	12%

#### **COURSE POLICIES:**

There are classroom behavior policies which must be followed or the student will be asked to leave the classroom:

- 1) No project work is to be done in class unless specified by the instructor.
- 2) No work is to be done the 10 minutes before class during the time set for class transition.
- 3) When asked a question, a response with eye contact is expected.
- 4) Storyboards/Flowboards/Thumbnails are expected for peer evaluation. Bring them.
- 5) When doing peer evaluation on Storyboards/Flowboards/Thumbnails, appropriate input is required.
- 6) Appropriate language should be used at all times. The classroom should be considered a place of work.
- 7) No laptops unless prior approval.
- 8) No earphones on during lecture.

You are expected to follow the attendance policy stated in the Hagerstown Community College Catalog. If a student misses a class, he or she will be responsible for any and all material covered in class including assignments, etc.

You are also expected to follow the Honor Code of Hagerstown Community College which can be found on its website ([www.hagerstowncc.edu](http://www.hagerstowncc.edu))

The instructor reserves the right to modify course content.

**E-Mail:**

You must make sure that you have a working Hagerstown Community College email account by the end of the second week of class. All email correspondence must occur through this account. I will only respond to addresses with the hagerstowncc.edu extension. All others will be instantly deleted.

You are expected to check your email twice a week, with one of those checks 8 hours or less prior to class.

Furthermore, email must be composed in a professional manner. Proper grammar and punctuation is expected. There must be a greeting and a name attached.

If you are submitting work in the form of an attachment, you must have your initials or full name as part of the file name. The attachment should have your full name in it as well.

E-mails without these pieces may not receive a response or may be instantly deleted.

**Services for Students with Special Needs:**

Students who have special needs are encouraged to identify themselves to the Coordinator of Disability Services as early as possible. Reasonable accommodations based on current documentation are provided to qualified students.