COURSE:
SDE 205 Game Programming and Development II, 3 Credits
Tuesdays, Thursdays
10:00 AM – 12:45 PM

INSTRUCTOR: David Maruszewski

Office: ATC 206
E-mail: dpmaruszewski@hagerstowncc.edu
Phone Number: (240) 500-2361
Office Hours:
M 12:00-3:00
W 12:00-2:00
Campus Mail Box Number: In ATC 120

SEMESTER/YEAR: Spring 2017

COURSE DESCRIPTION:
Students completing this course will understand contemporary game industry platforms and their specific challenges. Through class discussion, technical applications, case studies, and team assignments students will learn the basics of video game projects and game designer tasks. The course includes an in-depth focus on the production cycle including: pre-production, the design phase, production (alpha, beta), and post-production (tuning, QA testing). Other topics include: video game design, game systems, scripting, level editors, level design fundamentals, power-up design, and enemy design. Laboratory fee required. Prerequisite: SDE 104 or consent of TCS Division.

TEXTBOOK:

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:
- Understand principles of video game production
- Create event driven programming environments and algorithms
- Develop game events through the use of C++
- Level and Mod design analysis
- Understand the differences in programming and developing of different genre games
- 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 and artistic 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.

<table>
<thead>
<tr>
<th></th>
<th>DIRECT Faculty Instruction In-class</th>
<th>Student Work Out of Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests (Study)</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Assignments</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Projects</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Total Hours</td>
<td>45 h</td>
<td>90 h</td>
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ASSESSMENT PROCEDURES:
Homework: Homework problems will be assigned in class. Assignments will be due the class after they are assigned, unless specified otherwise. Grades will be given on the -/√/+ system. 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.

On the final project you will be asked to give a presentation. It will be for grade and will be part of your overall project evaluation.

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. Some lab work may be used for testing as well.

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:

<table>
<thead>
<tr>
<th>Tests / Papers / Projects</th>
<th>Final Grade Scale</th>
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</thead>
<tbody>
<tr>
<td>Test I</td>
<td>12%</td>
</tr>
<tr>
<td>Test II</td>
<td>12%</td>
</tr>
<tr>
<td>Test III</td>
<td>18%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Peer Review</td>
<td>10%</td>
</tr>
<tr>
<td>Project 1</td>
<td>11%</td>
</tr>
<tr>
<td>Project 2</td>
<td>14%</td>
</tr>
<tr>
<td>Project 3</td>
<td>13%</td>
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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)

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.