GDD 450: 3D Game Design and Development – Fall 2015

MWF 2:30-4:30 PM in JHSW 316

Course Instructor
Brent Dingle, Ph.D.
Math, Stats, and Computer Science
Jarvis Hall Science Wing 219
Office Hours: TBA
dingleb@uwstout.edu

- Course Info: <u>http://www.uwstout.edu/lit/learn/index.cfm</u> (D2L/Learn@UW-Stout login)
- Text Books:Holistic Game Development with Unity, Penny de Byl, Waltham, MA : Focal Press, 2012.Creating Games with Unity and Maya, Adam Watkins, Waltham, MA : Focal Press, 2011.
- Software:Maya (3D modeling) -- http://www.autodesk.com/products/maya/overview
Unity3D (game engine) -- http://unity3d.com/
Unreal (game engine) -- http://unity3d.com/
Unreal (game engine) -- http://www.unrealengine.com/
TortoiseSVN (versioning) -- http://www.unrealengine.com/
TortoiseSVN (versioning) -- http://tortoisesvn.net/downloads.html
Audacity (audio editing) -- http://tortoisesvn.net/downloads.html
Audacity (audio editing) -- http://camstudio.org/
Other -- a needed

General Description

This course focusses on the design and development of games from initial pitch, through concept and design, planning, scheduling, implementing, and testing; concluding with a final release. Work is done in teams, modeling approaches used in industry. It is the first of a two-semester sequence to be followed by GDD-451.

Summary of Objectives and Learning Outcomes

Upon successful completion of the course, the student will be able to:

- 1. Integrate refinements into a prototype to create a completed 3D game title.
- 2. Analyze testing results and evaluate trade-offs to optimize the game experience.
- 3. Develop strategies and materials for marketing the 3D game title.
- 4. Demonstrate team work and leadership skills in the production of the game.

Industry Roles

The instructors are your *employers* and the *producers* of the game(s). They have final say on the game design and development. Be prepared to be treated as if you are an employee. Any behavior that can get you fired in industry will result in an automatic *F* for the course. This can include harassment, inappropriate behavior, not doing the job you were *"hired"* for, failure to show up for work, etc. You must inform your employer when you are sick and will not be at *"work"* and must clear any planned absences with your employer ahead of time (get your "vacation" approved).

Copyright

Copyright rules (see links on course site in D2L) are to be followed for all assets/resources used.

Code of Ethics

You (the student) are to conduct yourself in a professional manner, according to the code of ethics for your (anticipated) profession. For this class that code includes, but is not limited to:

- Strive to achieve the highest quality of product in an efficient and dignified manner using professional processes.
- Acquire and maintain professional competence; Complete assigned tasks on time.
- Accept and provide appropriate professional review.
- Be honest and trustworthy.
- Honor property rights including copyrights and patents; Give proper credit for intellectual property.
- Respect all teams and team members; No profane, lewd or derogatory comments will be tolerated.

Classroom Etiquette

Students are expected to attend every class. Students should bring their laptops to every class. The student, present or not, is responsible for obtaining material and information distributed and presented on all class days. All "extra" electronic devices should be set to mute or off before coming to class. This includes, but is not limited to, cell phones, iPods, pagers, PDAs, and laptop volume control. You (the student) may use your laptop (or other electronic devices) as required for classroom activities. However, the instructor may at any time, for any reason, require, on an individual basis, usage of any device be discontinued. *No photos, video or audio recording is permitted without prior written permission from the instructor*. Smoking of any kind in class is prohibited. Disruptive behavior may result in the instructor requiring its direct and indirect source(s) to leave the classroom for the day. The consequences of which remain the burden of the source(s). Arriving late, leaving early, or sleeping in class is at the student's own risk as are the consequences thereof.

Attendance

This is a professional class, so you will be evaluated as a professional. Attendance is expected, just as if you were working. <u>Absences will result in a grade reduction</u>. Assume each *unexcused* absence will result in a loss of 10% of your total grade for the semester per absence: miss 1 class get 90% at best, miss 2 classes and you get an 80% at best, miss 3 get a 70% at best...

Workload

This class meets for 6 hours a week. This time will be used for class activities, coordinating among team members, and other activities that cannot be accomplished individually. You will be expected to devote <u>at least</u> 12-15 hours per week **outside of class** to learn the tools and complete your assignments and assigned tasks on the project. You will be expected to report to your group on your progress daily. Weekly project updates will be required from each group.

Grading

Your grade includes quality of project(s), individual effort, quality of individual work, professionalism, collaborative effort, peer-evaluations, responsiveness to critiques, progress checks, etc. To encourage active participation in teams you will have 2 intermediate grades (individual=*I* and team= *T*). If I < T then final grade = *I*, else final grade = avg($I \otimes T$).

Final Grade:		
96% or above will earn you at least an A	80% or above at least a B-	
92% or above at least an A-	76% or above at least a C+	
88% or above at least a B+	72% or above at least a C	
84% or above at least a B	56% or above at least a D-	
	96% or above will earn you at least an A 92% or above at least an A- 88% or above at least a B+ 84% or above at least a B	

Please note the usage of the words "at least"

Academic Dishonesty

Students are expected to do their own work unless specifically directed otherwise by the instructor. Plagiarism and cheating are serious offenses and may be punished by failure on assignment, failure on exam, failure in course, and/or expulsion from the University. For more information, refer to the <u>university policy</u>.

Incompletes and Withdrawals

By <u>university policy</u>, incompletes will only be given in circumstances that do not allow a student to finish the class, and only if it is beyond the student's control. Poor performance is not a condition for an incomplete. Withdrawals (dropping the class) will be allowed in accordance with <u>university policy</u>.

Special Needs

UW-Stout strives for an inclusive learning environment. If you (the student) anticipate or experience any barriers related to the format or requirements of this course you should meet with the instructor to discuss ways to ensure full access. If you determine that additional disability-related accommodations are necessary please contact the Disability Services office (206 Bowman Hall, 232-2995, www.uwstout.edu/disability).

AFFIDAVIT OF ELIGIBILITY AND RELEASE

By taking this course, you agree to the following:

In consideration of the support provided by the institution to the students and instructors in creating video games required for all GDD courses, we submit this Affidavit/Release to the University of Wisconsin-Stout with the understanding that ownership of the work/product will remain with the creators, subject to a perpetual, non-exclusive, royalty-free license to the University to use, distribute, reproduce, display, adapt, and make derivative works of the work product for any educational or promotional purpose.

Important Dates:

This is a tentative schedule and may change – including addition or deletion of items. Check with your instructor(s) as the semester progresses.

Sep 09	First Day of Class (Wednesday)
Sep 11	Self-Presentations and Resume
Sep 14	Pitch and Inception Doc
Sep 30	Prototypes
Oct 2	Quiz 1
Oct 5	Team Rules
Oct 26	Sprint 1 Ends (week 3 ends)
Nov 16	Sprint 2 Ends (week 6 ends)
Nov 23	Game Testing/Demos
Nov 25 – 29	Thanksgiving
Dec 07	Sprint 3 Ends BETA release version of game due (week 9)
Dec 14	Last class day (Monday) – any and all remaining work due (personal website, resume)
	Check University Calendar for "Final Exam Day"

Note on Sprints: At the end of each sprint a presentation of status is expected as well as artifacts produced. The artifacts may vary for each sprint. At the end of most sprints team member evaluations of each other will be due. Plan accordingly. Understand further, once sprints start, each week a functioning/runnable build should be produced. Check with your instructor(s) for any changes or additions to this.