DEPARTMENT OF
COMPUTING SCIENCE
UNIVERSITY OF ALBERTA

BioWare™
A DIVISION OF EA

CMPUT 250: Computers and Games
`https://eclass.srv.ualberta.ca/course/view.php?id=32794`

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Abstract

A computer game is the culmination of creative efforts of many different artistic and technical disciplines, integrated through the capabilities of the computer. Computer games are a new art form. They have changed the way we think about traditional activities. For example, role playing games are a new vehicle for story-telling; the reader becomes an active participant that influences the story.

Students in the course come from various faculties on campus, each bringing their own skill set. While students from different faculties may often take other courses together, rarely, if ever, are they required to work together in a collaborative manner where their disparate skills are needed to complete a term-length project. CMPUT 250 provides the students with such an opportunity. Each team of students builds a complete, self-contained game with a provided game engine. They refine their ideas through the study and application of design, storytelling, art, scripting, and music, which ultimately leads to vertical slice prototypes, a beta version, and final release. Related to the course, although entirely disconnected from grades in the course, there is the annual award ceremony where games from both terms compete in several categories: `http://cmput250.org`

Instructors from various University of Alberta departments are recruited to lecture in the course. Industry partners, such as BioWare Corp., offer lectures as well, providing students with practical advice on the completion of their projects, as well as feedback on the students' productions.

1 Course Description (copied from the calendar)

⋆ 3 (fi 6) (either term, 3-0-3) An interdisciplinary course for students in Science, Arts, and other faculties. The focus is on games as interactive entertainment, their role in society, and how they are made. Teams composed of students with diverse backgrounds (e.g., English, Art and Design, and Computing Science) follow the entire creative process: from concept, through pitch, to delivery, of a short narrative-based game using a commercial game engine. To achieve the required mix of backgrounds and experience, students must apply for admission to this course. Prerequisites: Second-year standing. See the Computing Science web site for more details at `http://www.cs.ualberta.ca/courses`.

2 Course Objectives & Learning Outcomes

This course pursues the following objectives:

1. gaining a hands-on experience of developing video games as a multi-disciplinary team project;

2. discussing the role of games in our society;

3. considering games as a form of art and, in particular, as a story-telling medium;

4. reviewing the history of video games and the accompanying technology such as AI.

3   Course Structure

The class will have two lectures per week – Tuesdays and Thursdays, 11am to 12:20pm – between September 1st and December 6th, 2016. Our lecture room is GSB 553. There will also be two hours of lab time per week, with slots to be scheduled. The office hours are in ATH 3-38, by appointment – contact Prof. Vadim Bulitko at `bulitko@ualberta.ca`

3.1   Lectures

Lectures will be taught by a number of instructors from various departments at the University of Alberta as well as from BioWare. Attendance is highly recommended and will help get a better mark on the quizzes throughout the term. A tentative lecture schedule is available on the eClass site `https://eclass.srv.ualberta.ca/course/view.php?id=32794`. It is subject to change during the term.

3.2   Labs

Several two-hour lab slots will be reserved in CSC 1-67. You will be assigned to one of the slots. The lab serves multiple purposes. First, it is the place for you to work on your term project (i.e., building your game). Second, a number of marked labs will introduce game development tools to you. Third, the lab exam will be held there. Fourth, several marked milestones related to your game will be held in the lab as well.

During scheduled lab slots, we will have teaching assistants staff the lab and help you with your work. You are also welcome to work in the lab outside of the reserved time slots *but* then students from other scheduled classes/lab slots will have priority in the use of the lab.

Your submissions for Labs 1-6 are to be walked through with a TA in the lab slot you are assigned to. You should be able to answer any of the TA's questions related to the submission to demonstrate your understanding of your submission. Late lab submissions incur a penalty of 10% per day.

3.3   Term Projects

The term project is to build a complete 30-minute-long video game. This will be done by working in teams of six. The guidelines for team formation as well as associated milestones are provided on the course website.

Please note that dropping the course after the teams are formed will leave your team short of a person, likely affecting the resulting game and the team experience. So if you absolutely need to drop the course, please do so during the first week so that there is a chance to find a replacement for you.

4   Marking

Final grades will be assigned at the end of the term once cumulative term marks are available.[1] This will be done by setting cut-off points (e.g., an 'A' is at least x% of the maximum possible term mark). The cut-offs are absolute and not based on any *a priori* defined distribution/curve. You are *not* in competition with other students for your marks/grade.

Your mark depends on your and your team's performance. Specifically, you share your team's mark for the components marked as 'team' in Table 1. Note that your mark for the team components of the course can be reduced/increased if your contribution to the game production is noticeably less/greater than that of the other team members. We closely monitor the teams for load balance during the term. You do not share your mark for the milestones marked as 'individual' in the table.

Term marks are computed as a weighted sum of the several components listed in Table 1.

If you miss a marked component, you will have to contact the instructor *as soon as possible* and explain what happened. You may then apply for an excused absence (EA) which, if granted, will shift the weight of the

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[1]Grades are unofficial until approved by the Department and/or Faculty offering the course.

Table 1: Marked Components of CMPUT 250.

Component	Weight	Date/Time	EA weight shift	Type
M1: Team formation	1%	Sep 6 @ 6pm	n/a	team
M2: Concept pitch	5%	Sep 15 @ 10am	n/a	team
M3: Design document	5%	Sep 22 @ 6pm	n/a	team
M4: Vertical slice I	10%	labs of Oct 10 week	n/a	team
M5: Vertical slice II	10%	labs of Oct 24 week	n/a	team
M6: Beta release	12%	Nov 14 @ 6pm	n/a	team
M7: Beta evaluation	5%	Nov 21 @ 6pm	lab exam	individual
M8: Game trailer	5%	Dec 1 @ 10am	n/a	team
M9: Gold release	20%	Dec 6 @ 6pm	n/a	team
M10: Course evaluation	2%	Dec 7 @ 6pm	lab exam	individual
Labs	10%	labs Sep 5 - Oct 14	lab exam	individual
Lab exam	5%	labs of Oct 17 week	labs	individual
Quizzes	10%	Sep 16, Oct 7, Oct 28, Nov 18, Dec 2 @ 6pm	n/a	individual

component as listed in the table or waive the late submission penalty. For an excused absence where the cause is a religious belief, a student must contact the instructor within two weeks of the start of classes to request accommodation for the term. The instructor may request adequate documentation to substantiate the student request. Misrepresentation of facts to gain an EA is a serious breach of the Code of Student Behaviour.

5   Course Prerequisites

A strong interest in video games.

6   Past Evaluative Materials

Past lab exams and certain other milestone deliverables are available to the students. Certain games made in CMPUT 250 in the past are available in the lab.

7   Course Policies

Teamwork is required on game development. While the work is to be divided among team members, each team member must have an understanding of every part of the project (although he/she does not necessarily have to be an expert on all parts, just on his/her own). Your labs, lab exam and some other milestones are, on the other hand, individual work ("solo effort") with no collaboration allowed. Each milestone listed in the table above mentions whether it is a team or individual effort.

Anything that you use in your work and that is not your own creation must be properly cited by listing the original source. Failing to cite others' work is plagiarism and will be dealt with as an academic offence. You are welcome to consult the following website at the Office of Student Judicial Affairs `http://www.osja.ualberta.ca/Students/AppropriateCollaboration.aspx`.

In development of your game you may not use any materials (e.g., music, pictures, 3D models, code) for which you do not hold the copyright or do not have them licensed for inclusion in your game (e.g., with an appropriate Creative Commons license or a written permission from the copyright holder). We have prepared a collection of art assets cleared for CMPUT 250 use and will make it available to you.

This course is governed by CS Department policies. You are required to familiarize yourself with them: `https://www.ualberta.ca/computing-science/links-and-resources/policy-information/department-course-policies`

8   Academic Integrity

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (`http://www.governance.ualberta.ca`) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All forms of dishonesty are unacceptable at the University. Any offence will be reported to the Associate Dean of Science who will determine the disciplinary action to be taken. Cheating, plagiarism and misrepresentation of facts are serious offences. Anyone who engages in these practices will receive at minimum a grade of zero for the exam or paper in question and no opportunity will be given to replace the grade or redistribute the weights. As well, in the Faculty of Science the sanction for cheating on any examination will include a disciplinary failing grade (*no exceptions*) and senior students should expect a period of suspension or expulsion from the University of Alberta. For further information see `http://www.tie.ualberta.ca`

9   Textbooks

There are no required textbooks. Any instructional materials will be provided during the term.

10   Contact

Head instructor, Prof. Vadim Bulitko: `bulitko@ualberta.ca`

11   Additional Information

Students eligible for accessibility-related accommodations (i.e., students registered with Student Accessibility Services (SAS)) have both rights and responsibilities with regard to accessibility-related accommodations. Consequently, scheduling exam accommodations in accordance with SAS deadlines and procedures is essential. Please note adherence to procedures and deadlines is required for the University to provide accommodations. Contact SAS `http://www.ssds.ualberta.ca` for further information. Students who require additional help in developing strategies for better time management, study skills or examination skills should contact the Student Success Centre (2-300 Student Union Building).

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).