CIS250: Computational Media: Design and Development of Videogames

OVERVIEW
This course examines the interplay of art, programming, science, law and commerce in the creation, development, marketing and applications of videogames. It also details the ways game principles are being utilized for additional social purposes such as enhanced learning and training.

There is a close examination of the creative process behind successful games and lively discussions with invited industry leaders.

Students create working prototypes in small groups and develop companion marketing programs to illustrate the challenges of producing videogames in a professional context.

COURSE DESCRIPTION
The past thirty years have changed the media environment markedly. Smaller, more powerful microprocessors and graphics chips, coupled with a wide variety of transmission technologies and input devices have changed the way consumers choose to spend their leisure time. The choices compared to just one or two generations ago are dramatic and only promise to increase in the years ahead. The focus of this course is on the most rapidly growing segment of new media—videogames. Worldwide Videogame sales now exceed those of the international film and music industries combined. What creative processes and business decisions go into shaping the development of a videogame? How do industry professionals handle the mix of art, science and business necessary to make commercially successful games? There is a close examination of the creative process behind successful games and lively discussions with invited industry leaders.

Students create working prototypes in small groups and develop companion marketing programs to illustrate the challenges of producing videogames in a professional context.

The course details the key elements of programmatic development and the team dynamics necessary to complete complex software projects. The curriculum also includes learning to “Pitch” — one of the most important skills of successful entrepreneurs.

Past guest lectures have included many industry luminaries: Ernest Adams, Richard Bartle, Bob Bates, Mike Berlyn, Chris Crawford, Mike Dornbrook, Hank Howie, Rick Kaplan, Ken Levine, Steve Meretzky, Paul Neurath, Tom Nichols, George Sanger, Dan Scherlis, Mark Schuman, Tommy Tallarico, Warren Spector and Johnny Wilson.

The Instructor, Christopher Weaver, is the founder of Bethesda Softworks and co-founder of Zenimax Media—the largest private Videogame company in the Americas.
NOTE: The instructor makes extensive use of the Wesleyan Moodle Course Management System and students are responsible for checking the Moodle site each week for the most up-to-date listing of readings and other assigned materials.

**REQUIRED TEXTS:**


Course Pack, placed on reserve in the reserve bookroom in Olin Library
Other assigned materials available on-line and in Moodle

**Report Texts:**


**SUGGESTED ADDITIONAL READING:**


¹ This book may difficult to find as it is now out of print. An electronic copy is being made available for students in the library.
COURSE REQUIREMENTS:

Interpretive questions: (15 percent)
Each week students will submit at least one interpretative and thoughtful question based upon the written materials for that week, and one question intended for class discussion. The questions should show a solid grasp of the course material as well as provoking reflection on the part of fellow students. Student questions will help guide discussion of the course material. All questions are to be submitted as part of the Weekly Assignments for weekly discussion and review. [All questions must be posted at least two days prior to each week’s class.]

Student papers: (10 Percent)

1. Each Student shall submit a paper detailing the game that has most influenced them and why. The student should analyze various components of presentation, interface, narrative and gameplay and detail how these different issues worked as a whole to create an immersive experience.

2. Each student shall write a paper that proposes a novel game development project. The paper should have two parts: (1) a cohesive executive presentation paragraph detailing the functional idea in summary and (2), a more extensive portion that details the idea with specificity. The goal is for your concept proposal to be compelling enough to be chosen by fellow classmates as one of the Final Projects that students shall work to develop as part of a small team.

Mid Term Report (25 Percent)
(5 pps Undergraduate, 10 pps Graduate):
Research a topic of interest that grows from the course concepts using a book from the Report Texts list. Your goal should be to provide insight into the larger issues raised by the author and how those issues relate to key aspects of your course project. The topic for your paper should be developed in consultation with the Instructor.

Final Project: (40 percent) Each student will participate as part of a team that will be responsible for developing a class presentation and companion business plan for a software project. Each plan should take the overall videogame and multimedia industries into account and its various offshoots, remembering that each media genre represents a distinct user base. In most cases, these different media are sold into and consumed in some relation to each other. The ideal game concept would allow non-initiated consumers to derive benefit from the experience, while still being of interest to
a gaming audience. The student teams should consider the full panoply of hybrid media opportunities where a consumer can follow a story or product across multiple channels thereby developing a more rewarding and deeper overall experience.

Each student will participate on one of the chosen proposal teams to help execute on a development plan for each original property as defined by each team Producer. Submission materials should include a description of the product; a visual presentation; and a reasonably detailed account of how you propose to develop the product across multiple media (PC, console, handheld, mobile, comics, DVDs, music, film, video, websites, advertisements, etc.). You should have an idea of the primary audience for your product, yet think about marketing it to secondary audiences as well. Each team should be prepared to lead a discussion of the overall business strategy for their product and provide a comparison to other, similar products. As part of your overall strategy, each team should have a plan to expand its user base by facilitating a more participatory relationship to the property. Each team should be prepared to deliver a thirty-minute multimedia presentation, as well as strategies for the intended property that should include a range of support materials. Your materials can include: an interactive demo, a working prototype, a video, a graphic presentation, a website, storyboards, graphic designs, logos, art, photos, advertising campaigns, posters, etc. Each team project and the students contributing to that team, will be judged on the basis of the product’s overall quality, creativity and originality, understanding of core concepts, the quality of the team’s presentation and the student’s grasp of the business environment into which their product would be sold and supported.

**Class Participation:** (10 percent) While I do not take formal attendance, I am well aware of who arrives timely, attends regularly, participates actively and asks insightful questions.

**Course Prerequisites:** Coding; digital art; design, and writing experience will be useful.

**Class Size:** Limited to 25.

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**Plagiarism:** The use of another’s intellectual work without acknowledgement is a serious offense. It is the policy of the Department faculty that students who plagiarize will receive an F in the subject, and that the instructor will forward the case to the Committee on Discipline. Full acknowledgement for all information obtained from sources outside the classroom must be clearly stated in all written work submitted. All ideas, arguments, and direct phrasings taken from someone else’s work must be identified and properly footnoted. Quotations from other sources must be clearly marked as distinct from the student’s own work. For further guidance on the proper forms of attribution students should consult the style guides available in the Writing and Communication Center located at: [http://web.mit.edu/writing/Special/plagiarism.html](http://web.mit.edu/writing/Special/plagiarism.html)