CMS.922/CMS.610 Media Industries and Systems, Spring 2006
Prof. Christopher Weaver
Lecture 1:

About the Course

The sales for video games last year exceeded the domestic Box Office for Hollywood movies. In industry, the only way to determine success is by the amount of money you make. Video games sales have caught the attention of the public, and are now being recognized as a major market. This class won't be particularly technical, but students can talk offline with the professor if they have technical questions that have to do with design or programming.

In this class, we're going to learn what goes into making games and the differences between good ones and bad ones. You would be surprised at how sophisticated people are about playing games. Think for a minute, how much television students your age watch. You've all watched television, but when you think about it, you are surprisingly sophisticated. You are the most visually sophisticated generation because you have 50,000 plus hours by the time you're 21. Who better to understand the concept of what makes good TV, than you? Don't underestimate the importance of what you already know.

Information on the Professor's Background

In a lot of industries, the more inner communication among industries that occurs, the less connected they are to actual users. Chris Weaver started a company called Bethesda Softworks and created the first version of *John Madden Football*™. Bethesda Softworks made this game by happenstance. Weaver's engineer colleague wanted to work on football games, but the football games in the 80s were governed by lookup tables (statistical tables that have values and certain movements in the game would yield certain results). Look up tables are great for the first five times, but they get boring really fast. Weaver's colleague wanted to make a football game using these tables, but Weaver thought there must be a better way. Weaver didn't know much about football, but he theorized that a real-time physics engine could be made and combined with the colleague's knowledge of football. The pair created a game called *Gridiron*™. They took into account the physics of the game such as momentum, mass, direction, deflection, gravity and other "uninteresting" (physics) things, but this synthetic world was a very interesting experiment as it had never been tried before in a game of such complexity.

The pair took *Gridiron*™ and put it on a computer. It quickly became the best selling football game in the world for PC's. Johnny Wilson, then editor-in-chief of *Computer Gaming World*, accorded Weaver/Bethesda the recognition of having created the first physics-based sports simulation for personal computers. What's funny is that people who know the professor ask him how he could have created the first sports simulation as he knew so little about Football.

The professor answered that when they invented a physics-based world, it worked the way you would expect a synthetic world to work—without knowledge, that is. The world was not supposed to do any particular thing other than react to basic forces as if in the real world. It was the engineer who knew about Football rules and bounded (constrained) the synthetic world they created to follow the man-made rules of football. Other than that, at the time they didn't have the foggiest idea what they were inventing. The idea simply came out of a desire to improve upon the (then) current way of doing things and Weaver wanted to improve upon it.

Why use anecdotal stories?
Anecdotal stories provide interesting asides, but there's also a touch of morality play in these stories.

Bethesda Softworks is better known for *Oblivion*™, the role-playing game. The reason they created this role playing game was because the majority of the games available in the early 1990's were boring because of the diminutive geographic size. Solution: let's build a huge game.

The game world became the size of Great Britain with over 750,000 characters. There were people who were interested in going through all the quests, and people who just wanted to wander around and explore the world. Because of this broad appeal to young and old, experienced and inexperienced alike, the series has been extremely well received by the public and well respected within the game community. In fact the *Elder Scrolls*® series is now considered the reference standard by which all other RPG's are judged. The most recent chapter of the series is *Oblivion*™, which has gone on to become one of the best-selling RPG's of all time.

Quick overview of the course readings list and final presentations
In terms of readings: the books are good reads and carefully chosen. *Joystick Nation* is out of print and we will get a few shared copies put on reserve. Brenda Laurel's book is worth reading because she goes into great detail about the differences between the ideal and the real. Brenda has a beautiful way with language, and she paints a poignant story of a very smart, naïve, group of individuals who embark on a grand vision. In the 90's, Brenda believed that games weren't fair in terms of gender specificity, and the idea was that women would be more involved with games if games were made more interesting for women. At the time, it was a boy's world for video games (15 years ago). The book tells of Brenda's journey with her company, Purple Moon, and it is both fascinating and instructive on many levels.

Chris Crawford's book isn't very practical in terms of building, but Chris has a lot to say that is really helpful in understanding the *gestalt* of game creation..

The Bates book is one of the best and most accurate books on practical suggestions for how and why things are done in the games industry. If you master it you will have gotten an excellent education in what goes on in making games and surviving.

The suggested reading is just that. Some of the books and topics will be of interest to each of you. Some books will be dead on, while others aren't quite so accurate. But every book will teach you something that will make you better at developing a critical facility for evaluating ideas and taking them to the next level.

A few words on the final project. It is a team project and you will need to bring your projects to some realized fruition. You don't necessarily need to program anything or design anything. But you will need to pitch your idea to a group of people from the gaming industry who are tough critics. Pitching an idea is much more involved than you would like to believe, so don't underestimate it. It will be a lot of work to do it well and take a lot of time because you will come to realize that there are a large number of individual pieces, every one of which will need constant attention. If you try and fudge it by blowing the presentation off all term and pulling all nighters at the very end, I promise that you will end up with a garbage presentation and probably crash and burn. So, in the spirit of full disclosure, consider yourself warned.