Questions

Grab a piece of paper ...
1) What do you expect to learn from this course?

2) What do you want to learn from this course?
Course Objectives

- Develop a (medium-sized) application using object-oriented technology
  - Master an object-oriented programming language
  - Use programming tools: compilers, debuggers, profilers, etc.
  - Apply design patterns
- Concurrent programming skills
  - Work with threads
  - Inter-process (networked) communication
- Learn how to work in a (small) group
  - Communicate!
  - Use version control software
- Have fun and improve your portfolio!
Why a game?

- Video Games development requires skill in different Computer Science topics:
  - Graphics, Data Structures, Concurrency, Network, AI, Geometry, etc
- There is a growing interest in the topic among the students.

Mammoth Research Group
Summer 2008
Course Outline

- Overview
- Project Description
- Some lectures on selected topics
  - Object-orientation
  - Game Design
  - Network programming
  - Programming Tools
  - ...
- Group meetings
  - To discuss design decisions
  - To help with user-interface or game-related problems
  - To discuss group-related problems
Students must implement Naval Battle, a turn-based strategy game, as part of their requirement for the course.

The project must be completed in teams of 3, 4 or 5 students.

Students are free to use the technology of their choice to implement the game, although only the Minueto (Java) development environment will be officially supported.

They are four deliverables for this course: a design document, a project demo, an acceptance test and a final hand in.
10% Design Document
30% Project Demo
40% Acceptance Test
20% Final Hand In
Development Environment

- Whatever programming language you like
  - Must be object-oriented
  - Good examples are Java, C++, C# or Python

- Whatever platform you prefer
  - PC, Mac, Linux Macintosh
  - Xbox 360, PS3, ...
  - Gameboy, PDAs, iPod/iPhone, ...

- Officially, we support
  - Java / Minueto
    (http://www.cs.mcgill.ca/~minueto/)
Course Information

- 3 credits, 3 hours of lecture per week
- Monday, Wednesday and Friday, 9h35-10h25
- Trottier Building 0060
- Prerequisite: ECSE 321 or COMP 335 or COMP 303
- Co-requisite: none
Alexandre Denault

- 3rd Year PhD student
- Been at McGill since 1999
- Office: McConnell Room 322 (Soft Eng Lab)
- Email: alexandre.denault@mail.mcgill.ca
- Office Hours:
  - Monday & Wednesday mornings
  - (or send email for a different time)

Note: Contacting me on MSN or Facebook is of limits!
Community Involvement

Computer Science Undergraduate Society
http://csus.cs.mcgill.ca/

Be A Computer Scientist for a Week
McGill Computer Science Summer Camp 2009
Summer 2009
http://summercamp.cs.mcgill.ca/
Cool Books

- Postmortems from Game Developer: Insights from the Developers of Unreal Tournament, Black and White, Age of Empires, and Other Top-Selling Games, edited by Austin Grossman, CMPBooks, ISBN: 1578202140
Cool Websites

- http://www.gamedev.net/
- http://www.gamasutra.com/
- http://www.mobygames.com/

Artwork

- http://www.molotov.nu/?page=graphics
- http://www.vbexplorer.com/ (in VB Games section)
Project from Previous Years

SpaceConquest2.avi

SpaceConquest3.avi

StrategicContquest2.avi

WoodenCrusader.avi
Alex, count the number of people in the classroom.
http://www.cs.mcgill.ca/~adenau/cs361/

Download and read the Project Deliverables and the Game Rules.