CSCI 4070 & 6070
Introduction
Game Programming

[heavy programming focus]

**Course Overview**

Short Term Plan

- **Today go over expectations and course plan**
- **Wednesday: History of Games**
- **Thursday; we will start Part 1 of the Mojang movie**
  - » **And next Thursday we will watch Part 2: A case study of a successful game.**
- **Next week (lecture oriented)**
  - » **Introduction to game programming**
  - » **Continue : Game programming history**
  - » **TED talk (Will Wright's Spore Talk – 16 minutes)**
  - » **Create a simple game. [theme of course: simple/basic tutorials to provide fundamentals for hackathons and projects]**

Administration / Logistics

- **Who am I?**
  - » **Office: Boyd 219C**
- **Class:**
  - » **Check Web Page**
- **maria@cs.uga.edu**
- **Office Hours: Thursday After C**
  - » **And by e-mail appointment**
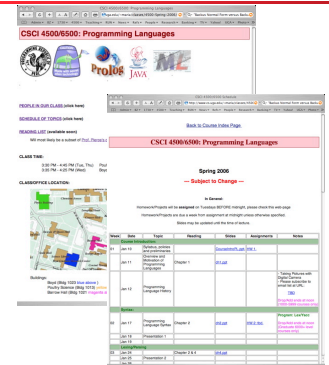- **TA: TBD - check class web page for updates… office hours …**
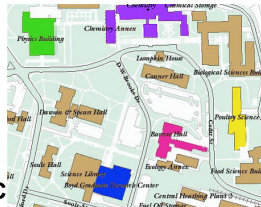
The 3 Communication Links

1. **Web Page (different from image on right), navigate via:**
   www.cs.uga.edu/~maria/
2. **Your responsibility**
   - » **Understand policies, honor code**
   - » **Work independently on projects & homework**
   - » **Check page often for updates "refresh" to get latest copy**
3. **Email list (tentative name)**
- **CS-GAME@listserv.uga.edu**

Course Objectives

- **Learn about creating games on different platforms, environments**
  - » **Understand what a game engine provides.**
- **Learn about using different gaming engines and environments**
  - » **2D: HTML5/Canvas**
    - – **Game Engine : ImpactJS ($99 not free),**
  - » ***3D Unity (free),***
  - » **Python/Pygame**
- **Algorithms:**
  - » **Path planning,**
  - » **Intelligent behaviors (tentatively)**
  - » **Events, Collision and Animation**
- **Hands on programming (heavy focus).**
- **Game History**

Course Theme: Gamified Course

- **Social Learning**
  - » **Learn from your peers**
  - » **Interact with your peers**
  - » **While maintaining integrity**
    - – **end up with a game that you created not your peers.**
- **Practice programming**
  - » **Create a game under different time constraints**
    - - **Within the class**
    - - **Within 12 hours.**
    - - **Within 20 hours**
    - - **1 week, 2-3 weeks (final project)**

How to get an A? B? C?... F?

- **Theory 40%**
  - » 2 Exams (10% each) + Final 15% + { Homework, quizzes } 05% = 40%
- **Practice 50%**
  - » Projects – planning/design
  - » Hackathons –think on your feet (90% if complete it in 10 hours – before midnight)
    - – Should raise your grade
    - – A+ if you do complete it in class.
- **Participation 05%**
  - » 100% attendance will **raise** your final grade by **2%**
  - » **Constructive** participation on class list may raise your grade by **½ %**
- **Demos: you need 'volunteer' for at least one show and tell.**

How to get an A? B? C?... F?

- **See syllabus web page …**

  percentage break down

Policy on Collaboration

- **Assignments/projects/summaries:**
  - » Purpose: familiarization of concepts and details of game programming
  - » Work on project independently (people or things)
    - – No direct sharing of code
    - – No line-by-line assistant
    - – No exchange of code snippets
  - » You are encouraged to ask questions of one another, and to respond to other student's questions (and especially on the email list)
- **Exams:**
  - » (Laptops ARE required – UGA rentals will **not** work)
  - » **No make-up tests** unless absence is due to **serious** illness. Doctor's diagnostic note is required. The final grade will be scaled accordingly.

Tentative/past projects for class

- **Projects using different gaming engines**
- **HTML5, JavaScript, PyGame, and Unity.**
- **Class Presentations: Social Media Games: Facebook Game / Case Studies. (Social Media**
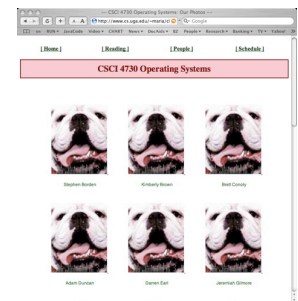- **(see cover page of class)**

Games

- http://cobweb.cs.uga.edu/~wah/games/Mario/index.html
- http://cobweb.cs.uga.edu/~ja/P2/index.html
- http://cobweb.cs.uga.edu/~burghaus/SaveBaseball/
- Locates of Doge: http://recursivetoasteroven.elementfx.com/platform/
- WASD: http://localhost/~ingrid/WASD/
- https://apps.facebook.com/cookie_crumble_game/? (directed study)
- StarCraft: http://hollums.github.io/games/SCBELdeploy/index.html
- Pacman: http://hollums.github.io/games/Pac-Man/pacman.html
- file:///Users/ingrid/Downloads/impactJSProject/lady_killer/index.html

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Homework 1

- **See schedule for details…**
- **Digital Image -- How to get out of the dog pound (and improve your grade).**