# CS 4911-A Design Capstone Spring 2014 Syllabus

#### **Course Information**

10:05 am - 10:55 am MWF Instr Center 217 Jan 06, 2014 - May 03, 2014

Instructor: Olufisayo Omojokun

Office: CCB 136

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Office Hours: Wednesday 11am-1pm, 2pm-3pm. Also, you can always come to me after

class, setup an appointment, or come in if my door is open.

### GT's Official 4911 Purpose and Outcomes [Written by Bob Waters]

#### **Purpose**

CS4911 fulfills the capstone project requirement for the computing degree. Students will experience a full lifecycle project, from conception to delivery in a multi-person student-led team.

#### Outcomes

(Accomplishment) As part of a multi-student team, produce and document a non-trivial software system which solves a complex problem requiring analysis of "design tradeoffs", "non-functional requirements" and "real-world customer needs".

(Experience) Upon completing the course, reflect upon the impact of your team's design decisions and the challenges of being part of an interpersonal team.

(Competency) Demonstrate the ability to identify, develop, and document customer requirements for a software-intensive system.

(Competency) Given a set of developed user requirements, demonstrate the ability to generate multiple designs, evaluate their merits, and choose the best overall design for the given problem.

(Competency) Given a final design decision, document the design using an understandable notation (such as UML).

(Competency) Prepare and orally present details of your project and justify the decisions and facts in your presentation during question and answer periods.

(Competency) Demonstrate the ability to plan and execute a semester-long project, tracking progress and making adjustments as necessary to stay on schedule.

(Competency) Demonstrate the ability to plan, document and execute tests to ensure the system meets both functional and nonfunctional requirements.

(Competency) Demonstrate the ability to deliver a completed system to a customer in a manner that allows the customer to install, operate and maintain the system without further student involvement.

## **Deliverables and Grading**

Description	Weight
Project planning /	8%
Status reports/	
Team contract/	
Peer and self evaluation	
Requirements, vision, user stories	10%
Design, architecture, rationale	12%
Sprint 1 presentation (in class)	5%
Sprint 2 presentation and design review (in my office)	5%
Sprint 3 presentation (in class)	10%
Acceptance test plan and report	5%
Delivery documentation	5%
Project post mortem	10%
Advisor evaluation	30%

## **Project Selection**

Available projects will be posted in T-square (Resources) and design.gatech.edu (see CSE column).

You can also create your own project, with the following restrictions:

- a. It's not part of your **regular** work assignment (e.g. RA or company)
- b. No Nondisclosure Agreements
- c. Clients accept the following:
  - 1. There's no warranty, maintenance or support that's guaranteed after students final grades are submitted
  - 2. Students own the resultant IP
- d. Preferably, the client is also not a (development) team member