

# Customer Guidelines for Computer Science Senior Design Course (CS 499)

## General

When defining a project, customers understand that the purpose of the Capstone project is to provide undergraduate students with a project experience while working on a requirements-based software development project in self-directed teams. All project concepts and aims must have a level of complexity which can be accomplished in the framework of a senior design project equivalent to a workload of 3 credit hours for one semester, roughly equivalent to a 9-hour workweek.

## Course Structure

The Senior Design Project course is a core course in the education of Computer Science students at the University of Kentucky. Students work in **self-directed teams**. A team typically consists of 3 - 5 Computer Science students of senior standing.

At the beginning of the semester, students examine customer-provided project proposals (usually 2 paragraph descriptions) and select a project. They then work with the customer to develop a requirements document. Based on this, the team develops a plan for the project, working with the customer to come to agreement on artifacts to be delivered, milestones, etc. Students then undertake the project, performing the phases of the software engineering lifecycle (note that many teams choose to use an agile process, if acceptable to the customer). The students will make a presentation to the class at least once during the development process. A second presentation and demonstration will be made at the end of development, with the class present (the customer may also attend, if possible). If so desired, the customer will then provide a major “change” request to the student team. The team will perform maintenance (repeating the entire development process, but just for the change). Upon completion, the team will make a final presentation and demonstration of the revised product. Usually this presentation will take place in the Marksbury Theater (with the class in attendance and possibly the customer). The Computer Science faculty and students are also invited to attend.

## Project Content

Proposed projects should embody the objectives and expected content defined in the **Course Syllabus**. The syllabus states that:

*The **course outcomes** of the CS 499 Senior Design Project course are:*

- *The student shall be able to perform the activities of the software lifecycle for a medium to large software project. The student shall use accepted project development processes in the project implementation.*
- *The student shall work as part of a team.*
- *The student shall present results of their work orally.*
- *The student shall document their work in a written report*
- *The student shall be aware of ethical considerations in software engineering.*

## Customer Expectations

Interested companies, UK organizations, alumni, Industrial Partner Association members, etc. may become project customers. It should be noted that not all projects proposed by such organizations will be selected (the number of proposed project topics may exceed the number of CS 499 teams).

Within the framework of the Senior Design Project course, all projects are conducted on a **best effort** basis by students. The customer understands that our primary goal is the education of computer science students, and as such *exploratory* or *proof-of-concept* projects can be quite successful as an undergraduate capstone senior project. Projects which are in the customer’s critical path cannot be accepted as Senior Design projects. The University of Kentucky cannot take any responsibility for results deemed by the customer as “insufficient,” nor do we assume any liability should the software fail to perform properly or as expected.

Customer commitments center around client-developer communication, and are no different than those one would expect between clients and developers in a conventional out-sourcing context. They include:

- Prepare a project proposal at the start of the semester in which CS 499 is offered.
- Promptly respond to students' efforts to clarify project details. This will be an iterative process, and is crucial if the project is to move forward in a timely manner.
- Respond to status (or other) reports submitted by project teams.
- Participate in the formal technical reviews, if possible.
- Provide a major maintenance request (new feature request or major change request to an existing feature) at the project presentation and demonstration. (optional)
- Attend the final project presentation and demonstration.
- Provide evaluation information on student performance.

Likewise, customers can expect students to:

- Promptly respond to customer questions.
- Make requests of customers in a timely manner (i.e., do not wait until project deadlines for customer information).
- Provide regular status reports and/or keep posted progress status updated.
- Deliver artifacts/products per the agreed upon schedule.

Any issues with student responses should be promptly communicated to the CS 499 professor.

Customers will receive one electronic copy of the deliverables from the sponsored student team:

1. Requirements (could be business requirements document, user stories, etc.)
2. Project plan
3. Source code
4. Other deliverables as agreed between customer and student team

## Intellectual Property

The CS 499 students own the original work that they perform in the course, in accordance with the University's Intellectual Property regulations. Customers should anticipate that students will use it for non-commercial purposes, including academic purposes, as a part of a resume or portfolio, and to demonstrate the student's skills. The student may also identify the customer by name, and the fact that they did the work for the customer as a part of CS 499. In no event may the students make any other use of any company trademarks or any information identified by Customer as confidential or proprietary. Customers who agree to undertake a project with a CS 499 team and CS 499 teams who agree to such a project acknowledge that they understand and agree to these terms.

I have reviewed this policy and agree to abide by it.

Signature \_\_\_\_\_  
 Printed name \_\_\_\_\_  
 Organization \_\_\_\_\_

Date \_\_\_\_\_