Syllabus for
CSC 499—Senior Project II
3 Credit Hours
Fall 2021

I. COURSE DESCRIPTION

The continued implementation, and documentation of a substantial programming project or investigation into one of the topics in the discipline of computer science.
Prerequisite: CSC 498 with a grade of "C" or higher.

II. COURSE GOALS

The purpose of this course is to enable the student to be able to gain synthesis experience in which the material learned in various courses is utilized to accomplish the a substantial programming project or investigation into one of the topics in the discipline of computer science.

III. STUDENT LEARNING OUTCOMES FOR THIS COURSE

As a result of successfully completing this course, the student will be able to thoroughly investigate an appropriate topic in computer science or design, implement, and document a software solution to an appropriate problem.

IV. TEXTBOOKS AND OTHER LEARNING RESOURCES

A. Required Materials
1. Textbooks
None
2. Other
None

B. Optional Materials
1. Textbooks
None
2. Other
None

V. POLICIES AND PROCEDURES

A. University Policies and Procedures
1. Students and faculty at Oral Roberts University must adhere to all laws addressing the ethical use of others' materials, whether it is in the form of print, electronic, video, multimedia, or computer software. Plagiarism and other forms of cheating involve both lying and stealing and are violations of ORU's Honor Code: "I will not cheat or plagiarize; I will do my own academic work and will not inappropriately collaborate with other students on assignments." Plagiarism is usually defined as copying someone else's ideas, words, or sentence structure and submitting them as one's own. Other forms of academic dishonesty include (but are not limited to) the following:
a. Submitting another's work as one's own or colluding with someone else and submitting that work as though it were his or hers;
b. Failing to meet group assignment or project requirements while claiming

to have done so;

c. Failing to cite sources used in a paper;

d. Creating results for experiments, observations, interviews, or projects that were not done;

e. Receiving or giving unauthorized help on assignments.

By submitting an assignment in any form, the student gives permission for the assignment to be checked for plagiarism, either by submitting the work for electronic verification or by other means. Penalties for any of the above infractions may result in disciplinary action including failing the assignment or failing the course or expulsion from the University, as determined by department and University guidelines.

2. Final exams cannot be given before their scheduled times. Students need to check the final exam schedule before planning return flights or other events at the end of the semester.

3. Students are to be in compliance with University, school, and departmental policies regarding Whole Person Assessment (WPA) requirements. Students should consult the Whole Person Assessment handbooks for requirements regarding general education and the students' majors.

   a. The penalty for not submitting electronically or for incorrectly submitting an artifact is a zero for that assignment.

   b. By submitting an assignment, the student gives permission for the assignment to be assessed electronically.

B. Department Policies and Procedures

1. Attendance and Excessive Absences - Attendance at each class or laboratory is mandatory. Excessive absences can reduce a student's grade or deny credit for the course.

2. Unexcused Absences - Any student whose unexcused absences total 33% or more of the total number of class sessions will receive an F for the course grade.

3. Computer Resources - Each Student who uses the computer is given access to the appropriate computer resources. These limited resources and privileges are given to allow students to perform course assignments. Abuse of these privileges will result in their curtailment. Students should note that the contents of computer directories are subject to review by instructors and the computer administrative staff.

4. Late Exams - Each instructor has his or her own late-exam policy, so an instructor may decide that an exam missed because of an unexcused absence cannot be made up.

5. Incompletes – As stated in the University catalog, incompletes are granted only for "good cause," such as extended hospitalization, long-term illness, or a death in the family. Students must petition for an incomplete using the "Petition for Incomplete" form at petitions.oru.edu. Very few incompletes are granted.

C. Course Policies and Procedures

1. Evaluation Procedures

The final grade is based primarily on the final paper or project that is produced; however, work submitted along the way toward the final result can have an effect on the final grade that is received. (For example, work handed in consistently late can lead to a lower grade.)

   a. The composite score is determined by the following distribution:

Assignments	50%

Mid-Project Presentation 50%

a. Grading scale:
A=90%
B=80%
C=70%
D=60%
F=59% and below

The student who wants to know his or her grade in the course should keep a record at all times of all points earned.

2. Whole Person Assessment Requirements
Check the WPA handbook for the requirements.

3. Other Policies and/or Procedures

a. Students should select their topic or problem and an advisor during CSC 498. Thereafter, students are to consult with their advisors weekly and meet the deadlines outlined in the Course Calendar.

(1) During the first few weeks of the semester, each student will make a presentation to the class describing his or her senior paper/project.

(2) After all presentations have been made, each student will be responsible for maintaining regular contact with his or her advisor.

(3) On an individual basis, several deadlines will be established to ensure regular progress toward completion of the senior paper/project. This will include presentation of outlines and rough drafts of the various chapters in the paper.

(4) Students desiring honors must arrange to defend his or her paper within the established deadlines.

b. The selection of paper or project and the choice of the topic cannot be changed without prior instructor approval. All requirements of CSC 498 must be fulfilled for a changed project.

c. Each senior project must satisfy grammatical standards specified by the University and taught in *Critical Reading and Writing.* General guidelines for correct style are outlined in *A Manual for Writers* by Kate L. Turabian. Other manuals are available.

(1) Footnoting follows methods used in scientific work. Consider the following example: Daley (7), Hopcraft and Ullman (14), W. Savitch (22), and many others have studied tradeoffs between program size and complexity, time and tape used, deterministic and nondeterministic Turing machines, etc.

(2) The footnote (7) refers to the seventh listing in the Bibliography at the end of the paper (see the Turabian book, pp. 68-74).

d. Senior projects must demonstrate the mastery and synthesis of multiple computer science and related knowledge and skills acquired in pursuit of a BS in CSC. All changes to the project charter must receive prior approval from the instructor.

e. Students desiring honors must arrange to defend their paper within established deadlines.

f. Students must take the initiative to petition for an incomplete grade if the paper is not completed by the end of the semester.

g. For students who choose to pursue an investigation, the nature of the investigation, the format of the research paper, and the execution of the investigation must be done in accordance to the agreed upon project from

CSC498.

h. For students who choose to build a project, a paper that documents the project must be written Shown below is a typical pattern that might be followed in a paper presented with a project:

(1) **Introduction:** A discussion of the origin of the problem that gives the reader sufficient insight to appreciate the problem.

(2) **User's View:** A presentation of the project as it would be seen by a typical user of the system that has been developed. Make use of figures and illustrations that clearly portray the things pertinent to a user (e.g., input forms, sample reports, menu screens, etc.).

(3) **Programmer's View:** A discussion of the technical underpinnings that make possible the view seen by the user, including a presentation of the pertinent file structures, data structures, and algorithms that have been utilized.

(4) **Conclusion:** A discussion of the project that includes people and computer problems experienced, good and bad aspects of the solution, related problems suitable for other projects, factors relating to the actual implementation of the solution, and a recommended plan of action. Also, learning experiences derived from the project are reviewed.

(5) **Appendix:**
This includes User's Manual and Program Listing.

VI. COURSE CALENDAR

Week	**Topic**
1-7	Project Execution
8	Fall Break
9-12	Project Execution/Completion
13	Project Presentation Prep and Delivery