CSci 487: Senior Project
Spring Semester 2017
Syllabus

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Department of Computer and Information Science
The University of Mississippi

23 January 2017 (revised links to assignments 30 Jan)

General Information

Catalog Description

CSci 487, Senior Project. Each student conducts an in-depth study of a current problem in computer science or a related area. Upon completion, the student presents the results in both oral and written forms.

Prerequisites

Completion of at least 6 hours of CSci 300 or above courses with a minimum grade of C-.

Position in Curricula

CSci 487, Senior Project, is a required course in the BSCS program and BA computer science major. It represents a capstone experience and is thus designed to be taken during a student's final semester on campus.

Course Goal

The goal of this course is to enable each graduating senior to demonstrate his or her ability to apply computer science knowledge and skills to solve current computing problems according to professional expectations.

Course Student Outcomes

Students in CSci 487 should, in the course of the semester, demonstrate the following:

1. An ability to apply knowledge of computing and mathematics that are appropriate to the discipline (BSCS Program Outcome a)
2. An ability to analyze a problem and to identify and define the computing requirements appropriate to its solution (BSCS Program Outcome b)
3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet requirements (BSCS Program Outcome c)
4. An understanding of professional, ethical, legal, security, and social issues and responsibilities (BSCS Program Outcome e)
5. An ability to communicate effectively with a range of audiences (BSCS Program Outcome f)
6. An ability to analyze the local and global impact of computing on individuals, organizations, and society (BSCS Program Outcome g)
7. An ability to use current techniques, skills, and tools necessary for computing practice (BSCS Program Outcome i)
8. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design decisions (BSCS Program Outcome j)
9. An ability to apply design and development principles in the construction of software systems of varying complexity (BSCS Program Outcome k)

Oral Communications Expectations

The University of Mississippi expects all of its graduates to be competent in basic oral communications skills. In this and other computer science courses, students are expected to demonstrate this competency by exhibiting the following fundamental skills:

- Appropriate interactive communication skill

  Students should have the ability to listen effectively and to respond appropriately to orally transmitted messages from others. This may involve a verbal or non-verbal response to an instruction or a reasonable and appropriate engagement in conversation.

- Adequate oral delivery

Students should have the ability to elicit a comprehensible oral message, regardless of the topic or nature of the setting. The student should be able to communication with adequate clarity (articulation, pronunciation, volume, rate, and language usage) to be understood, given that listeners have reasonable tolerances for different dialects and accents.

- Ability to construct a coherent and logical message

  Students should have the ability to deliver a coherent and logical argument or response to a question. The student should be able to adapt this message to a level of discourse that is appropriate for the audience.

- Ability to communicate in the context of the computing discipline.

  Students should have the ability to communicate effectively in a professional computing setting. This includes use of appropriate technical language, use of abstraction, interviewing skills, formal presentation skills, conducting a meeting, and working cooperatively with others in groups.

Department Grading Policy for Senior Project

It is the policy of the Department that no grades of "I" (Incomplete) will be assigned in this course for failure to complete the project on schedule. If you do not complete the project by the end of the semester, a grade of "F" will be assigned.

Spring 2017 Section Details

Time and Place

4:00 - 5:15 p.m. Monday-Wednesday; Weir Hall 235

Instructor

Dr. H. Conrad Cunningham, Professor, Computer and Information Science
Office: 211 Weir Hall
Telephone: (662) 915-5358
Email: hcc@cs.olemiss.edu
Web: Professor Cunningham's Homepage (http://www.cs.olemiss.edu/~hcc)
Office hours: 9:30 - 11:30 a.m. MW (or by arrangement)

Teaching Assistant

None

Communication Policy

Students may contact the instructor by telephone or email or meet him during his office hours. He will attempt to respond to email and telephone messages within 24 hours during the work week. Emails or telephone calls arriving outside the 8:00 a.m. to 5:00 p.m., Monday-Friday workday may be deferred until the next workday.

Methods of Instruction

This course requires each student to complete an individual computing project. Each student must submit several written documents and present several oral reports during the semester. At the end of the semester, each student must make a formal oral presentation of his or her project to the faculty, sponsor, and fellow students and deliver the required materials to the sponsor and instructor.

There are no examinations. There may be a few lectures or in-class learning activities.

Course Materials

It is the student's responsibility to determine what books, reference materials, data, hardware, software, and other resources may be needed to complete the project and to arrange to obtain access to those resources. The student should discuss this issue with the sponsor and instructor before beginning a project and as needed later.

Course Expectations and Attendance Policy

The instructor expects each student to attend all scheduled class meetings and individual meetings with the instructor and sponsor. The instructor also expects each student to complete and submit each assignment by the stated deadline.

Each student should interact with the sponsor, instructor, and fellow students in a professional manner.

Assignments and Grading

CSci 487 is a regular, graded, three-credit course. The student's semester grade will be based on the instructor's overall evaluation of the quality of the work. The instructor will evaluate factors such as technical correctness, efficiency, usability, design elegance, consideration of ethical and social impacts, grammatical and effective written and oral communication, timely submission, class and meeting attendance, and professional interactions with the sponsor, instructor, and fellow students.

The instructor will *not* view the grading for this course as a strict point system. The following assignments, with the given relative weights, will contribute to the determination of the semester grade:

Assignment	Weight
Prospectus	5%
Bibliography	10%
Design Specification & Presentation	10%
License Agreement	5%
Users' Manual & Overall Product Usability	15%
Product Implementation & Documentation	20%
Final Oral Presentation	10%
Sponsor Evaluation	10%
Final Report & Overall Project Quality	15%
Final Interview & Exit Survey	

The instructor may, in some circumstances, ask you to revise and resubmit a document within some specified period of time.

Your written work must reflect that you have a college degree; be certain that there are no misspelled words or grammatical errors in any document that you submit. The instructor will deduct points on any assignment containing misspelled words or grammatical errors.

Similarly, your oral presentation must also reveal that you have a college degree; your final presentation must be free from grammatical and spelling errors.

Take advantage of the features (e.g., spelling and grammar checking) of your word processor and, especially, of the resources provided by the University. The University provides the Writing Center to help you with these problems.

University of Mississippi Policies

Students with Disabilities

University policy provides for reasonable accommodations to be made for students with verified disabilities on an individualized and flexible basis as specified under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA).

Students with disabilities who believe they may benefit from classroom or other accommodations should contact the *Office of Student Disability Services* for information at 234 Martindale, 662-915-7128 (Phone), 662-915-7907 (TTY Phone), or sds@olemiss.edu (Email).

Any student requesting accommodation under this policy should present the instructor with the required documentation early in the semester and make arrangements in advance for each examination or assignment.

Copyrighted Materials

Materials used in connection with this course may be subject to copyright protection under Title 17 of the United States Code. Under certain Fair Use circumstances specified by law, copies may be made for private study, scholarship, or research.

Students should not share electronic copies of copyrighted materials with unauthorized users. Violations of copyright laws could subject individuals to federal and state civil penalties and criminal liability as well as disciplinary action under University policies.

Appropriate Use of Information Technology

The Information Technology (IT) Appropriate Use Policy sets forth the privileges of and restrictions on students, faculty, staff, and other users with respect to the computing and telecommunications systems offered by the University of Mississippi (UM). This policy is designed to protect the University community from illegal or damaging actions by individuals, either knowingly or unknowingly. Inappropriate use exposes the University to risks, including virus attacks, compromise of network systems and services, and legal issues. This policy directly addresses copyright issues related to illegal downloads and peer-to-peer file sharing.

For questions about the Appropriate Use Policy, send an email to aup@olemiss.edu.

Academic Integrity

The University of Mississippi is dedicated to supporting and sustaining a safe and scholarly community of learning dedicated to nurturing excellence inside and outside of the classroom. Each student has a duty to become familiar with University values and standards reflected in University policies, and each student has a duty to honor University values and standards reflected in University policies. These policies are outlined in the *M Book*. For a complete listing of policies, please visit the University Policy Directory.

As a student in CSci 487, you are expected to conduct yourself in a professional and ethical manner according to the policies, procedures, and expectations of the Department of Computer and Information Science, School of Engineering and College of Liberal Arts, University of Mississippi, and discipline of computer science.

The University's academic discipline procedure will be followed in this course. Violations of academic integrity may result in anything from a grade reduction on an assignment to expulsion from the course, depending on the severity of the violation.

Verification of Student Attendance

The University must abide by Federal guidelines to verify the participation of students. For all course types, including thesis, internships, labs, online courses, etc., the instructor must verify your participation based on some type of participation. In this course, the instructor will verify the physical attendance of each student and report it during the first two weeks and otherwise as required.

Student Privacy Policy

The University of Mississippi protects the privacy of all students, including online and distance learning students, through adherence to the Family Educational Rights and Privacy Act of 1974 (FERPA) through compliance with other institutional policies and procedures governing the management and security of protected information of faculty, staff, and students, and by outlining the expectations of privacy for the university community as regards to electronic information. See the *Student Information and Privacy Policy* for more information.