

CMSI 499

I N D E P E N D E N T S T U D I E S

<http://myweb.lmu.edu/dondi/spring2006/cmsi499>

Spring 2006 — Doolan 106
Variable sessions, meetings, semester hours
Office Hours: TR 1:30–3pm, 4:30–6pm

John David N. Dionisio, PhD
e-mail: dondi@lmu.edu, AIM: *dondi2LMU*
Doolan 106; (310) 338-5782

Course Objectives

To embark on a self-directed course of study in a specific area of computer science, under the guidance of the instructor. The student selects the topic and assists in identifying source material. In addition to the specific topic, the student will learn how to organize, execute, and document an intensive, individualized semester of self-study. Additional objectives depend on the selected subject matter.

Course Requirements

Dependent on the topic.

Materials and Texts

To be selected by the student under the guidance of the instructor.

Course Work and Grading

Your graded coursework will consist of, at a minimum, a study journal in the form of an on-going blog and a final paper that documents the overall course of study. Additional coursework, such as a programming project, depends on the specific topic. In general, the blog, final paper, and additional deliverables are evenly weighted to determine the final grade.

Letter grades are determined as follows: $\geq 90\%$ gets an A– or better; $\geq 80\%$ gets a B– or better; $\geq 70\%$ gets a C– or better. Fractions of a percent ≥ 0.5 round up to the next integral value. The instructor may curve your grade upward based on qualitative considerations such as degree of difficulty, effort, time constraints, and overall attitude throughout the course. Grades are never curved downward.

Study Journal (Blog)

You are asked to maintain a Web log (blog) of your progress. No specific blog service or server is required; we will select whatever is most available or convenient at the time. Your blog serves as an on-going account of your study. Blogging gives you an opportunity to express yourself while ideas or events are still fresh, at the same time providing structure and persistence that gives it lasting value.

Your blog will be graded according to the same criteria as the final paper (see below). The frequency or number of blog entries affects the content and organization components of the blog's grade. It receives equal weight with your final paper as well as any other topic-specific deliverables.

The study journal will be graded at the end of finals week, May 5. You are, of course, free to maintain the blog beyond the semester — the spirit of a 499 course is, after all, to give you an opportunity to get official credit for something that you would want to study on your own anyway. Continuing the blog provides you with a framework for pursuing this study beyond the scope of the semester.

Final Paper

You are asked to document formally the overall result of your studies in a final paper at the end of the semester. The paper shall consist of at least the following sections:

1. An introduction that states the background and motivation for this course of study,
2. A literature review describing the source materials studied,
3. A summary or survey of what was learned during the semester, and
4. Where applicable, a description of additional coursework performed as part of the independent study (e.g. project, other deliverables).

To compel you to focus on the actual work and content of the project (as opposed to busy work such as formatting and reference management), the paper must be written using LaTeX. We will talk about LaTeX early in the semester. A LaTeX outline for the paper will be provided to get you started.

There are no hard limits on paper length, but 10–20 pages in LaTeX’s default article format, not including the list of references cited, is typical. Your paper will be evaluated along the following criteria:

1. *Content (40%)*: What is the quality of the work? Are the background and motivation relevant and well-stated? Is the literature review thorough and well-described? Is the summary or survey complete and substantive? How well-documented is any additional coursework, if any?
2. *Organization (30%)*: Are concepts and the flow of ideas easy to follow? Are all required sections present and clearly identified? Are additional sections clear and logical?
3. *Writing (20%)*: Are statements clear and easy to follow? Is the language precise, unambiguous, and grammatically correct?
4. *Polish (10%)*: Is the content properly proofread? Are there many misspellings, typos, or other formatting faux pas?

Your final paper receives equal weight with your blog as well as any other topic-specific deliverables. The final paper is due at the end of finals week, May 5.

Projects (where applicable)

Depending on the specific subject matter, you may be asked to develop a term project based on your studies. Project details vary according to the topic; these will be set early in the semester. The project receives equal weight with your blog, final paper, as well as any other topic-specific deliverables.

The project will be evaluated along the following criteria:

1. *Design (30%)*: How good is the overall structure of the program? Is it clear, easy to understand, flexible, and easy to maintain? Is it elegant or innovative? How closely does it follow the “one change, one place” rule of thumb?
2. *Functionality (30%)*: How well does the program work? Does it accomplish the project’s goals? Are its results accurate or correct? Does it perform its tasks in a reasonable amount of time?
3. *Naming (20%)*: Are program entities — classes, subroutines, variables, etc. — clearly and consistently named? Do their names correspond to their functions and roles?
4. *Comments (20%; 15% with shared repository)*: Are comments provided where appropriate? Are the comments clear and well-written? Does the project take advantage of any special support for comments provided by the project language or platform (e.g., Javadoc in Java)?

5. *Shared repository use (where applicable, 5%):* Do you commit your code at reasonable intervals? Do you provide adequate descriptions of your commits?

Tests (where applicable)

Depending on the specific subject matter, exams may be given during the course of the semester. The overall result of all exams receives equal weight with your blog, final paper, as well as any other topic-specific deliverables. All tests are *open-paper*-everything at a minimum, and may allow electronic lookups depending on the scope or subject matter.

Attendance

Meeting and session schedules are determined individually, and may vary according to the specific subject matter and/or course work. Remember that the late registration and change of program deadline is January 13. The deadline for withdrawal or credit/no-credit status is March 17.

University Policy on Academic Honesty

Loyola Marymount University expects high standards of honesty and integrity from all members of its community. Applied to the arena of academic performance, these standards preclude all acts of cheating on assignments or examinations, plagiarism, forgery of signatures or falsification of data, unauthorized access to University computer accounts or files, and removal, mutilation, or deliberate concealment of materials belonging to the University Library.

Course Schedule

Dependent on specific subject matter.