

CISC-497*, Fall 2008

Robin Dawes, Richard Linley, and Mary McCollam

The Course

The course covers a wide range of topics of current importance in the computing field, including moral and ethical issues, professional questions, and technical problems. A secondary purpose of the course is to give students practice in making oral presentations, participating in and organizing discussions, researching topics, and writing reports.

Week 1

Week 1 will start off with some organizational information, and will also present some activities to start building the skills necessary for success in this course. **It is essential that all students attend Week 1 to meet the other members of their first research team, and to learn the subject of their first research project, which is due in Week 2.**

Weeks 2 to 7

Each week will address a particular subject area. During the preceding week, students will be organized into research teams to explore different topics within the area.

In the first class meeting of the week, each research team will make a presentation regarding their chosen topic. Some of the class will also hand in short written reports on their own specific research on the topic (500 - 750 words, not including references).

During the course, each student will submit three of these short reports.

In the second class meeting of the week, the class will engage in a discussion of the issues raised that week in the presentations and in the readings. All students are expected to participate in the discussion. There is a participation component in the evaluation scheme.

Each week, each student will be required to submit a short written response to a question based on a reading from the text.

Week 8

Week 8 will be slightly different – rather than prepare individual papers and oral reports, each team will create a Research Poster on the topic “The Future of Computing”. Posters will be displayed to and discussed by the other students in the class.

Weeks 9 to 12

On November 6, Dr. Michael Geist will be giving a guest seminar to our combined CISC-497* class. This seminar will also be open to the University community, and will be announced as part of the School of Computing Distinguished Seminar Series. Dr. Geist is the Canada Research Chair of Internet and E-commerce Law at the University of Ottawa.

In the last four weeks of the term, each student will make a 20 minute presentation on a topic that they have researched. Students are expected to prepare a report on their topic (2000 - 3000 words) for submission no later than the Friday of the last week of classes.

Students are required to attend and evaluate each of the talks, listen, and ask questions following the presentations.

Most 499 projects require that the 497 research topic be the research area involved in the 499 project, so that the background research for the 499 project will be done in preparation for the 497 presentation. Presentations in 497 are expected to address the social, ethical and legal issues of a topic, as well as technical details.

499 projects will be posted by the end of September. If you are not doing your background research for your 499 project, you may choose a 497 research topic within one of the application areas listed below under "Other Research Topics". Your presentation may not be on a topic covered in the undergraduate curriculum and may not duplicate a presentation given in another course.

You must let your CISC-497* instructor know the topic of your final presentation by the end of Week 6 of the term.

The Team Presentations

Each team will be allotted an equal amount of time to present the results of their research. Your instructor will discuss their expectations for these presentations.

The Individual Presentations

The schedule for these presentations will be established well in advance of the first presentations. Your instructor will discuss their expectations for these presentations.

The Short Papers

Half of the class will submit their first short paper in Week 2. The other half will submit their first short paper in Week 3. Papers are due in class on Thursday.

For those who submit their first paper in Week 2, the second paper is due no later than Week 5, and the third is due no later than Week 8.

For those who submit their first paper in Week 3, the second paper is due no later than Week 6, and the third is due no later than Week 9.

The Other Research Topics

Listed below are four application areas. You may choose a subtopic within these for your research project. Under each topic are a few possible subtopics. Many others are possible. Not all the ones listed need to be presented and, in fact, some are too long or too short to be appropriate as one person's topic. Think of other possibilities. If you are choosing one of these topics (or something else not on the list) you must let your 497 instructor know as soon as possible. If your proposed topic is too similar to another that has already been chosen, you will be required to find another topic.

Applications Of Computer Modeling And Simulation

- Forecasting (Economic, Political, Meteorological, Environmental)
- Chaos Theory

Computers In Music, Drama, And The Fine Arts

- Computer-Generated Music
- Virtual Reality in Drama
- Computer-Assisted Art
- The Computer in Film and Literature

Computers In Medical Diagnosis And Treatment

- Medical Imaging and Image Analysis
- Computer-Assisted Surgery
- Prosthetics
- Pharmaceutical Databases
- Expert Systems in Diagnosis

The Use Of Technology In Learning And Teaching

- Education and the Internet
- Learning with Hypermedia Systems
- Learning Technologies for the Disabled

The Text

The course text is *Ethics for the information age*, 3rd edition by Michael J. Quinn. It is important to have this book as we will be assigning readings and exercises from it.

Your written work is required to be of a professional quality and must adhere to the APA guidelines as given in *A Canadian Writer's Reference* by Diana Hacker. This book is available from the Queen's Bookstore.

The Evaluation

There will be NO examination in this course. Grades will be based on the following contributions:

6 short presentations	@ 4%	=	24
6 readings and responses	@ 1%	=	6
3 short papers	@ 6%	=	18
1 poster tour	@ 8%	=	8
1 long presentation	@ 15%	=	15
1 long paper	@ 15%	=	15
Class participation		=	14

Note: Attendance is required at all class meetings. Any absence without an excellent reason will result in a 5% deduction from the final grade. Instructors must be informed of anticipated absences as far in advance as possible.

The Schedule

Week of ...	Topic
Sept 10	Introduction/Organization
Sept 17	Networking
Sept 24	Intellectual Property
Oct 1	Privacy
Oct 8	Computer and Network Security
Oct 15	Computer Reliability and Professional Ethics
Oct 22	Work and Wealth
Oct 29	Poster Presentations
Nov 5	Guest Speaker and Research Project Presentations
Nov 12	Research Project Presentations
Nov 19	Research Project Presentations
Nov 26	Research Project Presentations