COMP 4520 – Undergraduate Honours Project

Calendar Description A research-based project on a specific area of computer science. In the term prior to starting the course, students must find a faculty supervisor willing to supervise their honours project and mutually agree upon a project topic and direction. Permission to take the course is given on an individual basis.

Prerequisite: Departmental permission and 4th year only

Course Description and Overview:

This is a three credit-hour course, completed in two phases.

Initiation (Phase I):

Phase I is to be done in the ***term prior*** to the course. It consists of:
- Identifying a faculty member willing to act as a project supervisor.
- Working with the faculty advisor to sketch out a project direction.
- Obtaining approval from the course director.

Research (Phase II)

Phase II consists of conducting the research under the guidance of the faculty advisor, with the following additional requirements:
- Writing a 2-page proposal. The proposal should describe the i) research problem or questions to be addressed, ii) 3 references to relevant literature with 2-3 sentences per reference on how the referenced work relates to the project, iii) anticipated methods for addressing these problems/questions, and iv) anticipated products of the research (e.g., software prototype, empirical results, algorithm, proofs, etc). This 2-page proposal is ***due by the end of the 1st full week of the term***.
- Documenting the project in a digital journal made available to the faculty advisor and course director. The digital journal (e.g., blog, wiki, etc.) should document progress, artifacts and results, etc., and should be

divided into two-week reporting periods. Students are encouraged to use graphs, figures and screenshots to explain their work.

- Presenting their research at a term-end seminar (consulting course director for presentation date, format and criteria).
- Writing a final project report. The final report should explain the aims of the project, the methods applied, and the results of the research. The use of graphs, figures and screenshots is again encouraged. As a rough guide, reports should be approximately 10 pages in length. Students are also encouraged to use this report as a basis for a paper to be submitted for publication at a peer-reviewed venue (in consultation with project's faculty advisor)

Notes:

This project course must represent substantial and new work to the student. A student cannot summarize previous work for which any credit or remuneration has been received. Both the student and the faculty member should expect to benefit from this project course, but it should be understood that the primary beneficiary of the project course is to be the student.

Course Evaluation:

Evaluation of the project will be carried out by the student's faculty advisor and the course director. Evaluation criteria will include novelty, amount of work, demonstrated understand of the topic, and quality of course deliverables.