(60-480) Practicum: Selected Topics in Software Engineering

Semester: Winter, 2011 Classroom: Erie Hall 2130

Time: 11:30am-2:20pm, Fridays

Instructor: Dr. Xiaobu Yuan

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Office-hour: 2:20am-3:20pm, Mondays and Wednesdays

♦ Calendar Description :

This course intends to connect emerging technologies with the student's theoretical background in Computer Science related to Software Engineering concepts and techniques. Selected application domains include protocol security, web systems and distributed object systems and the theories involved include graph theory, set theory, automata and compiler theory.

- Restricted to Computer Science students; Prerequisite: 60-311, 60-322 and 60-330.

♦ Course Objectives :2,3,4

To gain knowledge in advanced Human/Computer Interaction, and to develop proficiency in scholarly research related to Software Engineering. By means of practice, students are anticipated to acquire skills in:

Window-Based Virtual Reality

- Java programming with scene-graphs and scene-graph APIs,
- Interactive 3D applications using Java3D API; and

Scientific/Technical Research

- Selection of research topics
- Information gathering and organization
- Critical evaluation of literature
- Proposal of investigation and proof-of-concept
- Document writing

♦ Representative Workload : 5,6,7

Exercises	$10{ imes}2\%$	(to be checked in each of the weeks except the 1^{st} week)
Assignments	$5{ imes}2\%$	(to be checked in class on the dates as in course schedule)
Research Proposal	70%	(12:00pm on April 18, 2011)

¹Only email originating from a valid University of Windsor student account will be accepted from students wishing to contact the instructor through email.

²No student is allowed to take a course more than two times without permission from the Dean.

³Students with various documented disabilities attend University with success. Student Disability Services provides a variety of services and supports to students with documented disabilities (including: learning disabilities, attention deficit/hyperactivity disorder, acquired brain injuries, vision, hearing and mobility impairments, chronic medical conditions and psychiatric issues), who have registered with SDS. If you have, or think you may have a disability, you may wish to visit Student Disability Services to learn how best to meet your academic goals. The SDS office is located in Room 117, Dillon Hall, (519) 253-3000 ext. 3288 or online at www.uwindsor.ca/disability.

⁴Student Evaluation of Teaching (SET) forms will be administered in the last two weeks of the class.

⁵All exercises must be done individually. Assignments and exercises must be completed before the due time, and will be checked in each of the classes. Half of the marks will be deducted if no later than 24 hours, or no marks at all after 24 hours. Late submission must be supported by proper (medical) documentation (see footnote 7).

⁶All communications during evaluation procedures must be in English.

⁷With the support of Student Medical Certificate filled in and signed by a qualified physician, the weight of missed exercise/assignment will be added to other exercises/assignments.

♦ Evaluation :

- Research Investigation:

Every student is required to complete, individually or in a small group⁸ with the permission of instructor, the conduction of either scientific research or technical investigation on a selected subject of software comprehension and/or visualization.

- Students working on scientific research must submit a proposal that contains a 50-word abstract, a ten-page report (excluding title page, table of content, abstract, references, and appendices), and a bibliography of about 15 referenced papers.
- Students working on technical investigation must submit electronically a report that contains details of techniques under investigation, design, and implementation codes, plus a manual of installation and user guide.

- Evaluation Criteria:

All submissions will be evaluated based upon presentation and, most importantly, quality. A submission that is well-written and contains sufficient information will be assigned to marks in the B—range. To receive marks in the A—range, the submission must also contain insightful discussions and demonstrate creativity. Otherwise, submissions in lower than required basic quality will be assigned marks in the C—range or lower. Failing marks will be assigned to poor-quality, missed, or late submissions.

- Weights:

,	structure	presentation	review	method/design	proof	overall
scientific	5	10	20	20	5	10
technical	5	10	10	15	20	10

- Grading Scheme:

$$100 \ge A^+ \ge 93 > A \ge 86 > A^- \ge 80 > B^+ \ge 77 > B \ge 73 > B^- \ge 70 > C^+ \ge 67 > C > 63 > C^- > 60 > D^+ > 57 > D > 53 > D^- > 50 > F > 35 > F^-$$

♦ Online Materials :

- Course Website: www.cs.uwindsor.ca/~xyuan/480index.htm

♦ Policy on Cheating and Plagiarism :

Academic honesty requires the attribution of every idea with proper quotation to its source. References to other work should be explicit. Direct quote from other documents should be between quotes ("...") and the source clearly attributed. It is not acceptable to present writings of others as your own by collecting or rephrasing others' work. Your reports should reflect your own understanding and critical review of the literature by yourself.

The instructor will report any suspicion of cheating to the Director of the School of Computer Science. If sufficient evidence is available, the Director will begin a formal process according to the University Senate Bylaws. The instructor will not negotiate with students who are accused of cheating but will pass all information to the Director of the School of Computer Science.

The School of Computer Science Policy requires that the consequences of cheating and plagiarism be worse than the consequences of not submitting the requirement. Such actions may result in failing the course and further disciplinary actions by the University.

⁸The submission of group work must be accompanied with a contribution table, signed by all members, that clearly states each member's contribution in the group work.