

COMP 7210 – Research Methodologies

ROASS - Fall 2017

Course Information

Instructor		Course	
Neil Bruce		Research Methodologies	
office:	E2-408	room:	Machray Hall 500 (Fall)
		class:	10:00-11:15 MW
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Course Description

This course explores the research process in general and the resources for research in computer science. Traditional research approaches and use of emerging technology will be discussed. Attendance at department seminars and classes is required.

Course Outline

We will discuss the following topics in the course. Their order and duration will be determined as the course progresses:

- Academic Integrity and citations.
- Academic writing and tools (e.g. \LaTeX).
- Writing and Editing.
- Defining a Research Problem
- Exploring Related Work
- Experimental Design
- Quantitative and Qualitative Methods
- Critical Thinking
- Research Presentations

Textbook

J. Zobel, Writing for Computer Science, 2nd. ed., Springer, 2005.

Grading Scheme

Attendance	15 %
Assignments	25 %
Proposal Outline	30 %
Presentations	30 %

Attendance Attendance is expected at departmental seminars. There will be 10 marks available for attendance at seminars. In general, it is expected that you will attend any departmental seminars if possible. Seminars are typically held at 13:00-14:30 on Tu/Th. **You are expected to keep the seminar slot free for the duration of the Fall and Winter term. No exceptions will be made for students who miss seminars due to other events during the seminar slot.** It is understood that matters will come up over the terms that might prevent attending all of the seminars. If you are unable to attend a seminar, please inform the course instructor.

Assignments The course assignments will consist of research paper summaries, L^AT_EX exercises, writing and analytical / thinking tasks. There will be approximately 7-8 assignments, each equally weighted.

Thesis Proposal The major end-of-year assignment will be a mock thesis proposal draft. More details on this **will be provided later**.

Presentations You will be required to give two presentations during the course: a preliminary description of your research area (midway through the course) and a description of your thesis proposal (at the end of the course). More details will be provided on this in class.

Late Assignments Assignment due dates are firm. Extensions are not provided except for documented medical reasons. However, **ONE** assignment (assignment only, not thesis proposal) may be handed in late during the term (no questions asked). Penalties apply to this submission:

- less than 12 hrs late: 10 % deduction.
- less than 24 hrs late: 20 % deduction.
- more than 24 hrs late: 100 % deduction.

Assignments submitted more than 24 hrs late receive a grade of zero. **This extension may only be used once.** Subsequent late assignments receive a mark of zero. **There are no exceptions.**

Academic Dishonesty Students are reminded that there are penalties for academic dishonesty. Academic dishonesty includes submitting assignments that are not entirely the student's own work. You should read Section 8 in the university's course calendar on Academic Integrity, available here:

<http://bit.ly/15UKtoE>

A declaration sheet, which states that the work being submitted is completely your own, is available on the course website.

This sheet must be printed out, filled in, signed and handed in with your first assignment. You will not receive any marks for any assignments unless this declaration is submitted.