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COURSE DETAILS

Course Title & Number: COMP 7210 : Research Methodologies

Number of Credit Hours: 3.0

Class Times & Days of Week: 1:00 – 2:15 M/W

Location for classes/labs/tutorials: ISBISTER 107 (Fall), TBA (Winter)

Pre-Requisites: All thesis stream M.Sc. students are required to take this course. Therefore there are no formal pre-requisites, except that you are enrolled in this program.

Instructor Contact Information

Instructor(s) Name: Dr. Neil Bruce

Office Location: E2-408 EITC

Office Hours or Availability: Regular office hours will be announced in class, and decided upon based on minimizing scheduling conflicts with other courses.

Office Phone No. 204-474-7313

Email: bruce@cs.umanitoba.ca

Contact: Students may also contact the instructor by e-mail. Please include [COMP7210] in the header, so that these can be sorted appropriately by e-mail filters.
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.

General Course Information

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

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.

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.

Using Copyrighted Material

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and University guidelines. Copyrighted works, including those created by me, are made available for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the Copyright Act applies or written permission has been confirmed. For more information, see the University’s Copyright Office website at http://umanitoba.ca/copyright/ or contact um_copyright@umanitoba.ca.
Textbook, Readings, Materials

No formal text is required. You may benefit from the following textbook:


There are generally copies of this book around the department within labs, or elsewhere so it is unlikely that you need to purchase a copy.

Course Technology

Lecture notes, and announcements regarding the class will appear at the following URL:

www.cs.umanitoba.ca/~bruce/COMP7210

Assignments will also be made available from this page.

To hand in assignments, you should use the appropriate dropbox on UM Learn. Further details on this are provided in the assignment descriptions themselves.

Class Communication

The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit:

http://umanitoba.ca/admin/governance/media/Electronic_Communication_with_Students_Policy_-_2014_06_05.pdf

Please note that all communication between myself and you as a student must comply with the electronic communication with student policy (http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html). You are required to obtain and use your U of M email account for all communication between yourself and the university.

Academic Integrity

Any academic dishonesty will be dealt with according to the University’s discipline bylaw. Assignments and projects should be exclusively based of your own work, and providing work to another student or students is prohibited. While the depth of problems tackled by the course and building on prior knowledge and/or progress made on problems assigned is permitted, any external resources that provide partial solutions to problems should be credited, and special
effort made to disambiguate contributions to the overall body of work that are those of the student versus existing publicly available resources. A single blanket honesty declaration must be submitted prior to your first assignment and this will be treated as a contract applied to any and all materials submitted in satisfying the requirements of the course.

In addition to the general policies governing academic integrity and student discipline (Schedule “A” Policies and Resources), for individual work and group work, you should adhere to the following practices:

(i) Group projects are subject to the rules of academic dishonesty;
(ii) Group members must ensure that a group project adheres to the principles of academic integrity.
(iii) Students should also be made aware of any specific instructions concerning study groups and individual assignments;
(iv) The limits of collaboration on assignments should be defined as explicitly as possible; and
(v) All work is to be completed independently unless otherwise specified.

Students Accessibility Services

Student Accessibility Services
If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services  http://umanitoba.ca/student/saa/accessibility/
520 University Centre
204 474 7423
Student_accessibility@umanitoba.ca

Course Evaluation Methods

Assessment is based on active engagement in the course including attendance of Departmental and other seminars, a series of assignments, a mock thesis proposal, and in class presentations. Some of the assignments gradually build up sections of a thesis proposal, while others are intended to promote strength in areas important to independent research. The precise nature of these will depend in part on the background of students in this cohort. There will be approximately 6-7 small assignments over the 2 terms.
<table>
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<tr>
<th>Due Date</th>
<th>Assessment Tool</th>
<th>Value of Final Grade</th>
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<tr>
<td>On seminar dates</td>
<td>Attendance</td>
<td>15%</td>
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<tr>
<td>Sporadic</td>
<td>Assignments</td>
<td>25%</td>
</tr>
<tr>
<td>End of Winter Term</td>
<td>Thesis Proposal</td>
<td>30%</td>
</tr>
<tr>
<td>In Class, end of Fall term</td>
<td>Presentation I</td>
<td>10%</td>
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<tr>
<td>In Class, End of Winter term</td>
<td>Presentation II</td>
<td>20%</td>
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**Assignment Grading Times**

Generally assignment grades will be returned within 2 weeks of their due date barring extenuating circumstances.

**Assignment Extension and Late Submission Policy**

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 outside of those permitted according to University guidelines (e.g. illness).