INSTRUCTOR: Dr. Sunita Nadella  GSB105  Email: sisip@mcmaster.ca

Course Description:

This course is designed as a guide for students engaged in a Research project or Thesis to develop soft research skills. The goal for the course is to present a variety of research methods and techniques needed for the preparation of their research projects in general. This will include critical analysis of scientific papers as background information for their research, reference management tools, statistical analysis and selecting appropriate research methods. Preparation and presentation of project proposal in tandem with peer review and reflections will comprise significant aspects of the course.

Pre-requisites: Registration in Level IV of a Life Sciences program and permission of the Course co-ordinator

Not open to students with credit or registration in any department- or program-based applied placement, independent study, research seminar, internship or practicum course within the University.

Lectures:
- Lectures are scheduled: Monday 2.30-4.20pm.
- Thursday 3.30-4.20pm

Required Texts & Materials:
There is no required course textbook. All material for the course will be administered through Avenue to Learn (http://avenue.mcmaster.ca/) for students to download and bring to class.

Course Objectives:

By the end of this course students will be conversant with:
- techniques of gathering data/information
- Database applications
- Web applications related to database
- Multimedia/graphical designs
- the preparation of scientific reports
- the management of weekly status reports for a project
- effective science communication

Experiential learning, lecture, seminar and group-discussions are used in this course. Weekly communication with the instructor will be mandatory.

Absences & Missed Work:

IN CLASS PARTICIPATION: No documentation is required and no penalty will be assigned if students miss one class per term during the tenure of the course. For every class missed thereafter 1 mark will be deducted from the participation grade.

IN RESEARCH PLACEMENT: if you are absent from the university for a minor medical reason, lasting up to 3 calendar days, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form (MSAF). Absences for a longer duration or for other reasons must be reported to your Faculty office, with documentation, and relief from term work may not necessarily be granted. When using the MSAF, report your absence to course instructor or designate. You must then contact the instructor/instructional assistant/other immediately (normally within 2 working days) by email. Please refer to the contact list on the first page of this outline for appropriate email addresses. The instructor/instructional assistant will indicate what relief may be granted for the work you have missed, and relevant details such as revised deadlines, or time and location of a make-up exam/quiz/test. Please note that the MSAF may not be used for final deliverables, nor can it be used for a final examination or its equivalent.

***IMPORTANT****: You must identify Sunita Nadella (sisip@mcmaster.ca) as the contact on the MSAF form and immediately after using the online tool, students MUST contact Sunita Nadella at this email regarding the nature of the relief. Failure to do so may negate the opportunity for relief.
Checking Your Grades:
All grade concerns and discrepancies must be reported to Sunita Nadella (sisip@mcmaster.ca).
Students are required to submit a formal regrade application to the Office of Associate Dean in the event of a disagreement about the Final assigned Grade. The Director, School of Interdisciplinary Science will then appoint an external examiner to verify/regrade the components of the course as appropriate. We strongly recommend students to refrain from contacting supervisors either in person or via email for grade changes once Final Grades have been assigned.

Communication between Students and Faculty:
The University's official method of correspondence with students is through a valid McMaster University e-mail account. It is the student's responsibility to keep his/her @mcmaster.ca account active and check it on a regular basis. All emails from students must include your full name and course code (LIFESCI 3A03/4B06/4C09). All emails will be replied to within 48-72 hours.

Student Responsibilities:
To get the most out of the course, you must be prepared to:
• attend all sessions, make up all missed work, and provide documentation for authorized absences;
• interact frequently with faculty, students, TAs, and other support staff;
• plan and manage your own time;
• complete preparatory tasks (such as reading, writing assignments, and initial research) in advance of sessions;
• develop and use reflective learning skills (for example identifying learning objectives, planning and carrying out research tasks, acting on academic feedback);
• work as an effective, efficient, and responsive team member on group assignments;
• check the course Avenue site, and your McMaster and Avenue e-mail daily for updates; and,
• follow all university policies and guidelines, and in all ways be a responsible university member.

Senate Student Policies
Students can view full policies here (http://www.mcmaster.ca/policy/Students-AcademicStudies/).
Senate Policy Statements are also available from the Senate Secretariat Office, Room 104, and Gilmour Hall.

• Academic Integrity - http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf
Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty.
The following illustrate only four of many forms of academic dishonesty:
• plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained;
• copying or using unauthorized aids in laboratory exercises
• improper collaboration in group work; and
• copying or using unauthorized aids in quizzes, tests and examinations

All students are reminded of the importance of academic integrity, and the serious consequences of academic dishonesty.

You acknowledge that your behavior in all aspects of this course should meet the standards of the McMaster University Student Code of Conduct. You understand that any inappropriate behavior directed against any of your colleagues, teaching assistants, or the instructional team will not be tolerated. Disruptive behavior during any session (e.g. lecture, seminar, lab, tutorial) such as talking, sleeping or non-class computing while an individual presents information, or constantly being late, will also not be tolerated. Abuse, ridicule, slander, inappropriate language, and discrimination towards instructors teaching staff, teaching assistants and other students will not be tolerated in any capacity. Shared spaces including e-spaces such as the Avenue to Learn course discussion board are to be considered inclusive and safe.

Section on Use of Turnitin.com
In this course, we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com and/or in hard copy so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to www.mcmaster.ca/academicintegrity.

Copyright Policy
In this course you will have access to material that is subject to copyright laws. This includes (but is not limited to) textbooks and all resources developed by the instructors such as lab manuals, demonstration videos, quizzes, assignments, tests, class notes and class slides. Under no circumstance are you allowed to share or redistribute this material in any printed or electronic form without the explicit written consent of the copyright holder. This includes posting any course material on Internet bulletin boards, course repositories, social networks, etc.

Academic Accommodation of Students with Disabilities
Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail sas@mcmaster.ca. For further information, consult McMaster University’s Policy for Academic Accommodation of Students with Disabilities.

**Academic Accommodation for Religious, Indigenous and Spiritual Observances**

McMaster University (the University) strives to be welcoming and inclusive of all its members and respectful of their differences. Students, staff, and instructors come from a range of backgrounds, traditions and beliefs. The University recognizes that, on occasion, the timing of a student’s religious, Indigenous, or spiritual observances and that of their academic obligations may conflict. In such cases, the University will provide reasonable academic accommodation for students that is consistent with the Ontario Human Rights Code, through respectful, accessible, and fair processes. [http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-Observances.pdf](http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-Observances.pdf)

The instructors and the university reserve the right to alter this outline if necessary. The instructors and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.