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

Course Description:
The primary intent of the Research Practicum is to introduce a student to faculty-directed research in a basic Science or clinical Health Science setting. It provides students a unique opportunity to work closely with faculty members on a research project focused on a topic within a life science discipline. Typically, the course will include readings from primary and review literature, data collection and analysis, and regular discussions among students, faculty and other research associates working under the direction of the principal investigator. The Research Practicum is for preliminary academic and "hands-on" research activities. The Research Practicum could be a possible means for students and faculty to explore the potential for an Independent Study/Project/Thesis (i.e. Life Sci 4A03, 4B06, or 4C09).

Pre-requisites: Registration in Level III of a Life Sciences program and permission of the academic supervisor and the Director of Life Sciences (or delegate).

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 Friday 3.30-4.30pm.

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 able to:

▪ Have a practical and guided experience that exemplifies aspects of the collaborative research process
▪ Opportunities to apply their knowledge of research methods in an actual research setting
▪ Understand the steps required to develop a good research proposal
▪ Have written a research proposal and submitted it to the Faculty mentor
▪ Gained sufficient experience in a research environment to pursue a subsequent independent study/project/thesis with an appropriate supervisor

Evaluation:

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<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Literature Review</td>
<td>15%</td>
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<tr>
<td>Midterm Report</td>
<td>15%</td>
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<tr>
<td>Lab Performance</td>
<td>25%</td>
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<tr>
<td>Presentation</td>
<td>15%</td>
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<tr>
<td>Lecture Participation</td>
<td>10%</td>
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<tr>
<td>Research Proposal</td>
<td>20%</td>
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<tr>
<td><strong>Total</strong></td>
<td>100%</td>
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Absences & Missed Work:
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 Sunita Nadella (sisip@mcmaster.ca).
Any modifications of the mark breakdown must be discussed and approved by the supervisor, student and Course Coordinator. Any change in submission deadline for any component of practicum must be justified in writing by the student, and submitted at least 5 days in advance of the due date, to the Course Coordinator. Late submissions will be penalized by up to 5% per day.

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 3RP3). 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 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.

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.


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.