

School of Communication Sciences and Disorders

# Research Project Guidelines – 2021/2022

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# 1. Objectives

All students enrolled at the SCSD are required to undertake some form of research experience. Unless the student applies to and is accepted into the thesis stream of the program, he or she will undertake research project activity assigned by the SCSD Committee on Studies (COS).

The purpose of the research project is to provide the student with an opportunity to obtain hands-on experience doing research or to develop the skills that are important for research including writing, critical thinking, knowledge comprehension, analysis of research quality, and review. Outcome products can include a research proposal, research paper, series of critiques of journal articles, or other options. The product should attempt to contribute to the knowledge base of the field or increase the effectiveness and/or efficiency of clinical practice.

By focusing on a topic within the field, the student will draw implications from research to practice and learn how to become a knowledge contributor and consumer. Depending on the nature of the project, students may conduct independent data collection and analysis, participate in the existing research of a professor, conduct a literature review and/or participate in a research seminar. The final product depends on the nature of the project. Through this experience, students are expected to improve their skills in organization, communication (e.g., learning appropriate methods of contacting external agencies with requests), and writing in a logical and coherent fashion; and therefore be better prepared for conducting large-scale projects in their professional practice and for practicing in an evidence-based manner.

# 2. Role of the Committee on Studies

The Committee on Studies (COS) is composed of three faculty members, one who serves as chair of the committee, and a student from SCSD. One responsibility of the COS is to provide ethical review and approval of projects that are not required to be reviewed by the Dalhousie University Ethics Review Board (REB). The COS also manages project assignments, enforces deadlines and shares responsibility for the integrity of work with regard to originality, quantity of effort, and the final products with the supervisors of each project.

# 3. Responsibilities of the Student

The project is a rigorous research experience for which credit is obtained. The student is responsible for (a) meeting the deadlines set by the School, and (b) meeting the expectations regarding quantity and quality of work set by the supervisor. The student is responsible for taking the initiative in carrying out the tasks required by the project and to ensure regular communication takes place. The length of a project is determined by the supervisor. All projects will span at least one Fall and one Winter semester and many will last for two years or more. Regardless of the length of time a project spans, students are required to register for two project classes: HUCD 7001 at the start of Winter Term Year 2, and HUCD 7002 at the start of Fall Term Year 3.

# 4. Responsibilities of the Supervisor

The supervisor will mentor the student in designing and carrying out the project, and is responsible for approving any project ethics proposal, report or other products. The supervisor's signature is required on everything a student submits to the COS or to any other official organization such as the Dalhousie REB. The student will communicate with the COS only with the knowledge and approval of their supervisor.

# 5. Project Description and Process

# **5.1 Types of Projects**

Each student must complete a single project. All projects are six credit hours. The format for projects can vary. Options are:

- (1) Research seminar (e.g., may involve journal article critiques) + completion of a major literature review or development of research proposal, research grant or ethics proposal.
- (2) Literature review + data analysis (supervisor supplies the data).
- (3) Literature review + REB proposal + data collection and analysis.

For any of the above options, a presentation in December of Year 3 is mandatory. A final written paper is optional and will be determined on a case-by-case basis in discussion with the supervisor.

If the project is part of funded research conducted by a faculty member, then the major expenses of the work are incurred by the faculty member. However there may be costs specific to completing the project (e.g., travel, copying or printing). These should be discussed and plans made for covering them early in the project.

# **5.2 Project Topics**

Faculty will offer project topics in February of Year 1 that coincide with the faculty member's interests and expertise. Project topics will be in the areas of normal communication processes or disorders of communication, broadly speaking. Student-initiated topics can be accommodated. If a student has a particular interest, they should discuss their topic and possible formats with a potential faculty supervisor and secure a commitment before the list of projects has been distributed in a given year. The faculty member will then include the project in their list of offers.

# **5.3 Individual and Group Projects**

Depending upon the project, students may work independently, in pairs, or in small groups (3-6 students). The faculty supervisor will be responsible for assigning work responsibilities to each group member. For group projects, the faculty supervisor may require that each group member submit a final product or the group may work together on one, depending on the nature of the project and the needs of the group. Students will be required to write drafts of project products, and submit revisions based upon the comments and suggestions of the supervisor(s).

### **5.4 Project Assignment**

Students will be assigned to research projects in the winter term of Year I following the process described below. In February of Year I, the COS will distribute a list and a brief description of all projects offered by faculty. Shortly after circulation of this list, a meeting with all project students will be held, during which faculty members will describe their offers and research interests to the students. Students are encouraged to read relevant literature and to discuss offerings with the faculty members for a better understanding of potential topics.

Students will then rank order their preferences for all projects proposed by faculty and submit their form with their rankings to the Chair of COS in the Winter term of Year 1. The COS will match students to projects; every effort will be made to accommodate the students' higher rankings.

# **5.5 Project Supervision**

Usually projects are supervised by one or two faculty members in SCSD. Co-supervision may also occur between faculty in SCSD and other departments (e.g., Psychology) or between faculty in SCSD and clinical staff working in the community. When this occurs, individual responsibilities will be worked out between the co-supervisors. However, the faculty supervisor from SCSD will always assume ultimate responsibility for ensuring that the project is completed and final products submitted within the required timelines.

# 5.6 Implementation of the Project

The implementation of the project varies with the project and the faculty supervisor. Students should meet with their supervisor shortly after project assignment to discuss how the project will be carried out, the required tasks, the final presentation, and the final products that will be required. A schedule of meetings should be agreed upon by the student(s) and supervisor at that time.

### **5.7 Final Presentation**

All students must present their research projects during the second week of December in Year 3. Students may choose from two presentation format options. One option is an oral presentation that should be 10 minutes in length for an individual project, or 15 minutes in length for a group project, that will be followed by a five-minute question and answer period. A second option is a poster presentation. Students should consult with their project supervisor regarding the most appropriate option for their particular project.

Students are required to submit a title of their presentation approved by their supervisor(s) to the Administrative Secretary via email by early November of Year 3 and must indicate at that time whether they will be doing a poster presentation or an oral presentation.

Students are required to submit an abstract of their project to the Administrative Secretary via email by mid-November of Year 3. Abstracts should be double-spaced and no more than 150 words. The abstract should briefly state the topic and the major findings or the outcomes of the research. The title of the presentation, the student(s) full name, undergraduate and any additional degrees held, the university(s) from which the degree(s) was granted, and the supervisor(s) name should also be provided. The abstract will be included in a Final Presentation Program.

### 5.8 Final Products

All projects culminate in *one or more* final end products, one of which will be the final presentation or poster. In addition, the final product may be a formal paper written in APA style. Depending on the nature of the project, the end product might also include a videotape, a manual, or a computer software program. Projects must be completed by the 3<sup>rd</sup> week in December of Year 3. If an extension is required, the student must ask the Faculty supervisor to grant one. If granted, the supervisor will email notification of the extension to the Administrative secretary. The extended deadline for submission of final products is the end of the Winter term of Year 3. An award will be given for the project with the greatest academic merit. Projects are nominated by supervisors in February of the students' 3<sup>rd</sup> year (see Appendix E). The winner is selected by the COS.

# 6. Ethical Review of Research Involving Human Subjects

Research projects that involve the participation of human subjects or analysis of data from humans require a proposal for ethical approval of the work. This proposal will be submitted to the COS, a Dalhousie University Research Ethics Board (REB), or a hospital REB. To decide if you need approval for your project and, if so, where to send your project proposal for ethical review, consider the type of project you are completing and consult your supervisor(s).

# **6.1 Five Types of Project**

There are five general types of projects:

- Projects that do not require ethical approval
  - Projects that do not involve human subjects e.g., systematic reviews, product development
  - Projects for which the faculty supervisor already has ethical approval from the Dalhousie University REB or a hospital REB

- Projects that <u>require</u> ethical approval but <u>do not involve vulnerable populations</u> (e.g., healthy adults and minimal risk)
  - Submit proposal to COS. Use the Dalhousie REB form.
- Projects that <u>require</u> human ethics approval and <u>involve a vulnerable population</u> (e.g., children, clinical populations, or more than minimal risk)
  - <u>Submit proposal to either the University's REB using the Dalhousie form OR a hospital REB</u> using the hospital form.
  - Dalhousie University and Halifax hospital REBs have a reciprocity agreement meaning approval from one implies approval from the other.
- Projects that require human ethics approval and involve hospital patients
  - Submit proposal to the appropriate hospital REB. Use the hospital form.
- Projects that require human ethics approval and involve schools
  - <u>Submit proposal to Dalhousie University AND THEN the appropriate school board REB</u>. Use the Dalhousie and appropriate school board form.

# **6.2 Ethics Proposal Submissions**

# REB Proposals to COS.

Proposals submitted to COS must be signed by the supervisor(s), use Dalhousie University Research Services forms and guidelines (<a href="http://researchservices.dal.ca/research\_1482.html">http://researchservices.dal.ca/research\_1482.html</a>). Students must email ethics proposals to be reviewed by COS to the Administrative secretary of SCSD.

# REB proposals to Dalhousie, hospitals or schools.

Dalhousie University ethics proposals should be submitted to either the Health Sciences or the Social Sciences REB, depending upon the project topic. Most of the time, proposals will be submitted to the Health Sciences REB. Dalhousie University REBs meet monthly. As discussed above, the forms and guidelines are posted on the Research Services website. Submission deadlines are also on their website (<a href="http://researchservices.dal.ca/research\_1482.html">http://researchservices.dal.ca/research\_1482.html</a>). If you have questions about the process you can contact Catherine Connors, Director (<a href="mailto:catherine.connors@dal.ca">catherine.connors@dal.ca</a>), or Angela Hersey, Manager (<a href="mailto:angela.hersey@dal.ca">angela.hersey@dal.ca</a>), of Research Ethics.

Hospitals and schools have their own submission forms and deadlines. Consult the appropriate website for more information. **Important:** Students must inform the Administrative secretary when a proposal is submitted to an REB other than COS. In such cases, email the title of the project, the student(s) involved, the supervisor(s), the date of submission, and the REB receiving the submission so that COS has a record of the project's review. Once final approval is received, the student must provide a copy of the final approval form to the Administrative secretary.

Students should be aware that **the ethical review process may take several months**, particularly if approval from more than one review board is required.

# 6.3 Data Storage and Confidentiality

For reviews conducted by COS, a copy of the approved proposal and the final ethics approval form signed by the Chair, COS will be stored in a designated area at SCSD. An important aspect of the ethics review by the COS is to ensure confidentiality of the data resulting from the research. Only the designated researchers (students and supervisors) are allowed access to the data during and after the completion of the project. Following completion of the project, data and signed consent forms are to be stored for a minimum of five years following presentation and/or publication, and should be destroyed after it is no longer needed. Data must be kept in a locked room housed within the SCSD, usually the supervising faculty member's lab or office. Any confidential patient information should be stored at the SCSD at all times. Any data (paper or electronic) removed from the School by the student researchers must have all identifiers removed to ensure confidentiality.

# 7. Ethical Review of Research Involving Animals

All animal research must be completed in certified lab space. Appropriate training is needed before a student performs any manipulation on animals. Such training will be provided either by the project supervisor or personnel in an animal care facility of Dalhousie University.

For all research that is conducted using animals, an animal use protocol must be submitted to the University Committee on Laboratory Animals (UCLA) for ethics review and approval. If the research project is not funded, a research proposal must also be submitted for academic peer review. Refer to the Research Services website <a href="http://researchservices.dal.ca/research\_1483.html">http://researchservices.dal.ca/research\_1483.html</a> for guidelines and protocol for submissions. The whole process may take two to three months.

Contact Information for the Dalhousie UCLA:

Leslie Lord, Secretary
University Committee on Laboratory Animals
1390 LeMarchant Street

Phone: 494-1270

Email: leslie.lord@dal.ca

# 8. Recruitment of Participants from NSHSC

After the supervisory committee approves the student's proposal and approval has been obtained from the Dalhousie REB, the student may wish to recruit participants from the Nova Scotia Hearing and Speech Centres (NSHSC).

**For Audiology Participants.** The student will submit two copies of the Request for Participants from NSHSC Audiology Patients form (see <u>Appendix</u> A) to her/his supervisor who will then forward the request to the Director of Audiology, NSHSC.

*For Speech-Language Pathology Participants.* The supervisor will contact either the Clinical Director of SLP (Barb Stoesz) for direction about recruiting the target group.

The Centres will approach potential participants who meet inclusion criteria and will provide names and contact information of those who agree to be contacted. The student must then follow the protocol scripted in <a href="Appendix B">Appendix B</a> to contact these individuals and seek approval to participate.

# 9. Equipment and Test Materials Access

Students may use any piece of equipment belonging to the SCSD to conduct their research. All equipment and test materials must be reserved and signed out from the reception desk. See <u>Appendix C</u> – Regulations for Borrowing Equipment and Test Materials.

# 10. Dissemination

Project students should discuss options for disseminating their work with their supervisor(s) and committee members early in the research process. Scholarly presentations (e.g., CASLPA, ASHA, CAA, SRCLD, etc.) and publications are possible and encouraged.

# 11. Project deadlines

February, Winter Term, Year 1 Project offers circulated

February, Winter Term, Year 1 Faculty present on their research and offers

Mid March, Winter Term, Year 1 Students submit ranking forms
Early April, Winter Term, Year 1 Students receive project assignments

Start of Winter Term, Year 2 Register for HUCD 7001

Start of Fall Term, Year 3 November, Fall Term, Year 3 December, Fall Term Year 3 End, Fall Term, Year 3

February, Winter term, Year 3 April, Winter Term, Year 3 Register for HUCD 7002

Students submit abstract and format of presentation

Students present projects at School event

Students submit supervisor-approved final products unless

supervisor applies for an extension

Supervisors nominate project for award to COS (optional)

Students submit supervisor-approved final products that have

received extensions

# Appendix A

# Request for Participants from NSHSC Audiology Patients

Student's Name:			
Project Supervisor:(SCSD faculty)			
Title of Project:			
Type of Study:			
Indirect Participant Contact (e.g	., mail survey, chart audit,	patient data base)	
Direct Participant Contact (inclu	iding phone survey)		
Number of Participants:			
Clinical Population:			
(PLEASE RETURN TO ST	<i>TUDENT MAILBOX</i> )		
Student's Name:			
The following clinicians may be	contacted regarding partic	cipants:	

# Appendix B

# School of Communication Sciences and Disorders Student Project/Thesis Telephone Contact

# **Potential Research Participants**

Hello may I speak with Mr./Mrs./Ms.
My name is I am calling from the Dalhousie University School of Communication Sciences and Disorders, which is affiliated with the Nova Scotia Hearing and Speech Centres. You indicated on the patient consent form when you registered with the Centres that you could be contacted about participating in research. Thank you for allowing us to contact you regarding our research project.
Please be aware that your participation in a study will not in any way affect your eligibility for services through the Centres. Any information used in a study will remain strictly confidential.
The purpose of this study is:
As a participant you would be asked to:
Would you be willing to participate in this project?
() Yes () No
(At this point, student can make arrangements to conduct the study: i.e., set-up appointment, begin telephone survey, etc.)

# Appendix C

# **Regulations for Borrowing Equipment and Test Materials**

# **Equipment Sign-Out**

A variety of audio-visual equipment is available for short-term use by students for academic/clinical purposes. The items available include:

- Tape Recorders (microphones also available)
- Digital Recorders
- Video Cameras (tripods also available)
- Headsets (with built-in microphones)
- External Speakers
- Stopwatches
- Otoscopes
- Audiometers
- Dictaphones
- VHS Tape Adaptors

To reserve or sign out equipment, students must go to the reception desk. Equipment will be signed out as availability permits and all equipment is signed out for a maximum period of <u>24 hours with no exceptions</u>.

Students who sign out equipment are responsible for its proper care and maintenance. All equipment should be returned to the reception desk in the exact condition they were signed out. All cords must be wrapped neatly and inventory checked before items are returned.

If a piece of equipment malfunctions, report this immediately to the reception staff.

Students are not to pass or lend any equipment to other students. The items must be returned to the reception desk and signed out by other students as necessary.

# **Test Material Sign-Out**

For a complete list of the tests available for sign-out, please see one of three grey duotangs in the Student Lounge. These duotangs must remain in this room at all times. All tests are available for sign-out from the reception desk and can be signed out for a maximum period of 24 hours with no exceptions.

Students who sign out test materials are responsible for their proper care. All items of each test should be returned to the reception desk in the exact condition they were signed out. **Inventory must be checked before items are returned.** 

Students are not to pass or lend any test materials to other students. The tests must be returned to the reception desk and signed out by other students as necessary.

# Appendix D

# School of Communication Sciences and Disorders Guidelines for Determining Authorship in Research Activities Involving Students and Faculty

The purpose of these guidelines is to facilitate the process of determining authorship credit and order in research activities involving students and faculty. Because of variation in the degree of independent work required for the thesis and other types of research activity, separate guidelines will be discussed for each category. Further clarification of these guidelines may be obtained from the School's Committee on Studies.

# I Thesis

A student selecting the thesis option is expected to assume considerable independence in developing and executing a study leading to a thesis document. If that document is subsequently submitted in part or whole for publication, the student will be listed as first author. The faculty supervisor as well as other individuals making substantial scholarly contributions should also be given authorship credit. Under exceptional circumstances, a student may not be listed as first author of a manuscript derived from the thesis. Such circumstance may include additional collection and/or reinterpretation of data along with the major revision of the manuscript by someone other than the student.

# II Research Projects and Other Research Activity

# A. Research Projects

A student selecting the research project option will engage in research activities where a faculty supervisor has primary responsibility for the conceptual aspects of the study. The student will implement all or part of the study under close supervision, and will be provided with the opportunity to participate in the conceptualization process. The faculty supervisor, student, and other individuals making substantial scholarly contributions may expect to receive authorship credit of a manuscript for publication that is derived from the project study. Authorship order will be determined by degree of participation in the conceptualization process and scholarly contribution leading to the final product. Consideration will be given to the following activities: developing and refining research ideas, conducting a literature search, creating the research methodology, collecting and analyzing data, interpreting results, and drafting manuscripts. Authorship order should be expected to vary from situation to situation. When a student research project has publication potential, it is recommended that authorship order be discussed early in the process. It should be understood that order may need to be revised based on actual rather than expected contributions.

# B. Other Research Activity (e.g., research assistantships)

For nonprofessional contributions such as data input and scheduling participants, students may expect to receive acknowledgement rather that authorship credit.

# Appendix E

# Award for Project with greatest academic merit

# **Submission Process:**

Supervisor nominates a project for the award to the COS secretary by February of the students' 3<sup>rd</sup> year.

Supervisor fills out an evaluation form that addresses the following criteria:

- 1. Intellectual curiosity
- 2. Independence of effort
- 3. Quality of written product or presentation: e.g., logical flow and clear communication of ideas
- 4. Potential contribution to the larger body of knowledge

# **Selection Process:**

COS selects the award recipient from the nominated projects by the end of April, Winter Term 3<sup>rd</sup> year, based upon the above criteria and also taking into account:

- 1. The number of students involved
- 2. The format of the project

# Appendix F

# **Research Project Award Evaluation Form**

(for faculty use only)

Student(s) name(s):	
Title of project:	
Number of students on project:	
Name(s) of supervisor(s):	
Format:	Written Submission Poster Oral Presentation

Using the following scale, please rate the student research project in comparison to other projects supervised:

Excellent (top 10% of projects I have supervised)
Very Good (top 15-25%)
Good (30-50%, i.e., expectation from typical graduate student)

	10%	15-25%	30-50%	<50%
Intellectual curiosity				
Independence of effort				
Clear communication of ideas				
Quality of final product or presentation				
Potential contribution to the larger body of knowledge				

### **Comments:**

\*Nomination form(s) due to Administrative Secretary on the first Monday in February\*

Revised: June 19, 2021