Physics
UNIVERSITY OF TORONTO

3rd and 4th Year Supervised Courses in Physics: Guidelines and Enrolment

- ✓ **Read** the Supervised Course Guidelines on this page.
- ✓ **Complete** the enrolment form on p.2, **fill in** the course syllabus on p. 3, and **return electronically** to the Course Coordinator, Prof. Paul Kushner (paul.kushner@utoronto,.ca).
- ✓ **Read** the expectations for the Supervised Course Oral Examination on p.4.

Supervised Course Guidelines

Approval:	Enrolment in Supervised Courses requires the approval of the Course Coordinator, Undergraduate Chair in Physics, or Designate such as the Course Coordinator).
Qualification:	✓ Enrolled in a Physics Specialist, Physics Joint Specialist, or Physics Major POSt. Exceptions can be made for students enrolled in a Physics Minor POSt. ✓ Minimum Cumulative GPA of 2.7 (B-). Exceptions can be made for students whose recent academic performance (e.g., Sessional GPA recently meeting this criterion) indicates that they will be successful in a supervised study course. Students with lower grades are encouraged to try the Independent Study course before attempting the Research Project course.
Finding a supervisor:	Students are required to find their own supervisor for a Supervised Course. The supervisor can be from Physics or other Science/Applied Science Departments at the University of Toronto. The Course Coordinator can provide assistance. Registration should be completed as soon as possible, and no later than the sessional deadline for adding courses.
Grading Scheme and Syllabus:	A grading scheme and course outline must be signed by student, supervisor, and Course Coordinator prior to enrolment. The Supervised Course syllabus must satisfy the following criteria: ✓ Meetings between student and supervisor, at least bi-weekly. ✓ A written report summarizing the study or research. ✓ An oral examination worth at least 30% of the grade. The exam consists of a 15-20 minute presentation and follow-on questions and discussion. The Undergraduate Chair, Course Coordinator, or other designate will be an examiner along with the supervisor. See Page 3 for expectations for the oral examination. ✓ Courses require a minimum of physics content either in their focus or in their methodology. For Physics students in Supervised Courses on topics related to our joint programs (e.g. in Biological Physics), exceptions can be made. Topics related to undergraduate laboratory development and Physics Education Research qualify. ✓ Work worth at least 10% of the grade must be completed by the course drop date of the session in which the course is taking place. ✓ All grades are due at the same time as for other courses in the session.
Workload:	The workload should be comparable to other courses at the third and fourth year level.
Limit on Supervised Study Courses:	A student may count up to 1.5 FCE of Supervised Study courses towards their POSt program requirements. *You may only be enrolled in one Supervised Course in Physics at a time*.

UNDERGRADUATE OFFICE, DEPARTMENT OF PHYSICS, UNIVERSITY OF TORONTO
McLennan Physical Laboratories, 60 St. George St., Toronto, ON, M5S 1A7 Canada
Tel: +1 416 978-7057 • ugchair@physics.utoronto.ca • http://www.physics.utoronto.ca

Enrolment Form for 3rd and 4th Year Supervised Courses

Date: _____

Name: _____

Student Number: _____

Email: _____

Program of Study, Year Enrolled: _____

Is your Cumulative GPA greater than or equal to 2.7? **Yes** **No**

Is your Sessional GPA greater than or equal to 2.7 ? **Yes** **No**

Supervised Course(s) you have already completed.	○ **PHY 371Y - Supervised Readings I** ○ **PHY 471Y - Supervised Readings I** ○ **PHY 372H - Supervised Readings II** ○ **PHY 472H - Supervised Readings II** ○ **PHY 478H - Undergraduate Research Project** ○ **PHY 479Y - Undergraduate Research Project**
Supervised Course that you wish to enroll in today (please note the 1.5 FCE limit).	○ **PHY 371Y - Supervised Readings I** ○ **PHY 471Y - Supervised Readings I** ○ **PHY 372H - Supervised Readings II** ○ **PHY 472H - Supervised Readings II** ○ **PHY 478H - Undergraduate Research Project** ○ **PHY 479Y - Undergraduate Research Project** ○ **PHY ____ - Other Undergraduate Research Course**

Year for this course: _____

Session for this course: **Fall-F** **Winter-S** **Fall/Winter-Y** **Summer F** **Summer S** **Summer Y**

Supervisor Name and Department	

○ **We have read and understood the expectations and requirements for this Supervised Study Course.**

○ **We approve the attached course syllabus.**

_____ _____ _____

(Student) **(Supervisor)** **(UG Chair/Designate)**

Syllabus and Grading Scheme (at least 30% for oral exam):

3rd and 4th Year Supervised Courses in Physics:

Expectations for Oral Presentation and Oral Exam

The oral exam consists of a 15 minute presentation followed by questions and discussion for typically 20 to 30 minutes. The examiners will be the student's supervisor and the Undergraduate Chair, Course Coordinator, or Designate. The latter convenes and chairs the exam. After the discussion, the student will be asked to step out of the room while the examiners discuss a grade for the exam. The student will then be asked to return, where the exam will be discussed and the student given a grade and additional feedback.

The oral exam, though preferably performed in person, can be conducted remotely at the discretion of the Course Coordinator and consistent with University Policies.

The Course Coordinator will only be involved in grading the oral exam, not in any other part of the course evaluation.

For the oral exam, the students are expected

- To have corresponded with the Course Coordinator on scheduling of the exam. The Course Coordinator will initiate the scheduling process normally about two months prior to the end of term.
- To have slides that are well prepared, which include an introduction and conclusion/summary as well as main results of the research project.
- To have practiced the presentation with the supervisor and/or with their research group.
- To be prepared to answer questions specific to their project as well as relevant background questions.
    - When asking questions, examiners shall bear in mind the student's experience and program of study.

This document was last updated September 1, 2022