Physics 490A Honors Physics Thesis – Fall 2025
No set regular meeting times

Prerequisites: None

Coordinator
Dr. Murray Wilson
Office: C3022
Phone: 865-6724
Email: murray.wilson@mun.ca (Preferred contact method)

Office Hours: 13:00 – 15:00 Wednesdays and by appointment.

Overview and Learning Objectives:
In this course you will work closely with a chosen faculty supervisor on a specific project involving experimental or theoretical work investigating a new concept in physics. Through this course, students will gain experience performing real physics research, learn how to properly formulate a research question, and gain experience performing in depth literature reviews and start writing a thesis. This experience is designed to give students interested in graduate studies a jump-start on their research skills. This is course is the first of a two-course series (P490A and P490B) which must be taken in sequence working on one thesis project. The expectation is that students will perform most of their research during 490A, and complete a written thesis describing their work the following term in 490B, to be submitted before the end of regular class time. P490A + B are collectively assigned two course-credits, and the amount of work put into the research and thesis should reflect this credit value.

Course Delivery:
This course functions differently to most other courses in that there are no regular lectures and meeting times. The primary contact each student has will be with their designated supervisor who will oversee their research project, and it is expected that students will work closely with the supervisors to manage expectations for the project. This supervisor, and the research project, should have been selected already during the 3rd year of their program. The course coordinator serves as a secondary point of contact for all students and for any aspects of the course administration that students need assistance with. Periodic check-ins will occur with the course coordinator to ensure that students are making progress.

Grading Scheme:
- PASS/FAIL.
  - Completion of 490A and future enrolment in 490B is contingent upon completion of a progress report that will be evaluated by your

project supervisor. This progress report must be submitted by **Friday December 1st.**

- This progress will outline work that has already been completed towards your research project, make a clear plan for completion of the project and thesis writing during the next term.

Milestones and meetings:
The items mentioned should be submitted to the coordinator via Brightspace by the date noted.

- Tuesday September 16th: Students provide coordinator with name of supervisor, title and brief description of project. Group meeting held this week with all students at a time TBD.
- Monday September 29th: Submission of an outline of the project proposal, and a brief (1-2 page) sourced literature review describing the area of physics. Individual meeting of the coordinator with each student during this week following submission.
- Monday October 27th: Progress report. Individual meeting of the coordinator with each student during the week following submission.
- Monday November 10th: Progress report outlining remaining tasks to be completed this semester. Group meeting held this week with all students at a time TBD, to discuss thesis writing strategies.
- Week of November 26th: Students give 10 minute long oral presentation on their progress.
- **Monday December 1st,** written final progress report due.

Important Dates
September 30th – Truth and Reconciliation Day
October 13-14 – Thanksgiving break
November 4th – Last day to drop course
December 1st – Final written progress report due

Course Disruptions
In the case of a class disruption or cancellation, and in the case of revisions to evaluation methods, students registered in the course shall be notified via Brightspace. Any necessary revisions to the evaluation methods resulting from such disruptions will be made in consultation with the students registered in this course. If a student demonstrates that they would be disadvantaged by the change, then, as per 6.7.4 of the University Calendar, accommodations will be made.

Students are expected to abide by the student code of conduct (https://www.mun.ca/student/media/production/memorial/administrative/student-life/files/supports-

services/respect/Student_Code_of_Conduct_May_11_2017.pdf) and academic misconduct guidelines in Section 6.12 of the university regulations (https://www.mun.ca/regoff/calendar/sectionNo=REGS-0748) as set out by Memorial University.

Memorial University of Newfoundland is committed to supporting inclusive education based on the principles of equity, accessibility and collaboration. Accommodations are provided within the scope of the University Policies for the Accommodations for Students with Disabilities (http://www.mun.ca/policy/site/policy.php?id=239). Students who may need an academic accommodation are asked to initiate the request with the Glenn Roy Blundon Centre (http://www.mun.ca/blundon) at the earliest opportunity.

The instructor reserves the right to restrict the use of electronic devices in the classroom if such use, by the discretion of the instructor, is deemed deleterious to the experience of other students.

Original work is expected to be submitted in this course. The use of artificial intelligence tools to generate assignment submissions is not permitted.