

The project courses PHY4006(two semester) and PHY4906(one semester) give physics students an opportunity to participate in scientific research activities in the Department, in conjunction with the courses PHYS4907/4908/4909 of the Physics Department at Carleton University.

The course work consists of the following:

- (i) The student performs some aspect of physics research work under the guidance of a professor in the Department. The range of choice of topics and activities for the project is quite broad. However, the project cannot be purely a “reading project” reviewing the literature only, but must also involve research done by the student. The course designation of “6 laboratory hours per week” actually requires considerably more work than that, just as other lab courses typically require substantial homework in addition to lab time.
- (ii) A written report and an oral presentation of the student’s work are given at the end of the course.
- (iii) In the two-semester course PHY4006 only, a written progress report is submitted at the end of the first semester, describing what has been accomplished so far, and what remains to be done to complete the project in the winter semester.

Schedule:

	<u>PHY4006</u>	<u>PHY4906</u> (Winter semester shown)
Choose project, register	by first two weeks of classes	by Dec. 2019
Start project	Second week of classes	Jan. 6, 2020
Progress report	Dec. 3, 2019	None
Oral presentation	T.B.A. (March/early April, 2020)	Same
Written final report	April 4, 2020	Same

Marking:

	<u>PHY4006</u>	<u>PHY4906</u>
Progress report	20%	—
Oral presentation	20%	30%
Written final report	60%	70%

Choosing a project:

Consult the list of projects suggested by professors in the Department and contact the professors to discuss projects that interest you. Projects may involve theoretical, computational, or experimental work, or possibly some combination. Projects other than those listed are also possible, however you must find a professor to supervise your work on it; if you have your own specific idea for a physics project, contact me or consult a professor working in the field of interest. A list of projects available in physics at Carleton University is available.

You must obtain permission to do a project by filling out the registration form for the Honours Research Project available at <http://science.uottawa.ca/en/students-etudiants/research-project> and then register for the course at the Faculty of Science office in Gendron Hall.

If you wish to do a project with a professor at Carleton University, please let me know by the start of September. Course-sharing registration at both universities must be done in this case.

If your Project Course supervisor was your employer in a previous job (e.g. summer employment), you must inform me of this. In all such cases, I require a one-paragraph description of (i) what the work of the job was, and (ii) what the work of the project is going to be, clarifying the distinction between the two. Of course, you cannot be paid to do any of your project course work!

Project description:

In all cases, I ask you to send me a short paragraph of 4-5 sentences briefly describing your project. (i.e. State the topic, the problem you will address, and the main method(s) to be used.) Due October 1.