

63274-741 (32) Physics Project (6l, 6p)

2018

Course summary:

Independent work on a topic that forms part of Physics, chosen in consultation with lecturers in the Department of Physics. The project should form part of the research activities of the Physics Department under supervision of a suitable supervisor. The project must be approved by the research committee of the Physics Department. A written report has to be submitted and an oral presentation must be given. Each student must also complete an oral examination.

Module relevance in programme:

The module aims to expose the student to relevant research activities in the physics department and to introduce the student to independent research and prepare the student for post graduate research. The student is presented with a choice of several possible topics, and should get the first taste of working on defining a research project, performing the research and making conclusions from the results, under supervision of experienced researchers. The student is exposed to the various tools and methods in research, and guided through the first steps of actual research, to prepare the student for independent research at MSc level. It aims to provide the student with a broad background in research in order to assist the student to make sensible choices for possible MSc and PhD research topics in future.

Outcomes of course:

This course exposes the student to independent project work. In particular the student is skilled in the use and reading of physics articles and the writing of scientific reports. A project supervisor will be allocated to the chosen project.

Lecturer:

Prof E G Rohwer
Telephone number: (021) 808-3372
E-mail address: egr@sun.ac.za
Office: Room 1009 in the Merensky Physics Building.

Mentor:

The Department of Physics has appointed a staff member as mentor for each year of its physics programme to be available to students for consultation. Students should feel free to discuss general issues related to the physics programme or specific modules in the programme with the relevant mentor, in addition to usual consultations with their individual lecturers of modules.

The mentor for the Honours programme and its modules is Prof KK Müller-Nedebock kkmn@physics.sun.ac.za.

Course content:

Independent project work in the field of the student's choice of honours course, that can be either of an experimental or theoretical nature.

Study material:

Depends on the project chosen, but will involve the reading of articles in Physics Journals available in the Library.

Assessment:

Methods of Assessments

A final mark is awarded on the basis of the written report which will be assessed in four parts as agreed upon at the beginning of the project (20%+20%+20%+20%=80%) and an oral presentation of the project and an oral exam (20%)