PH450 Project Overview

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Taken from http://www.iop.org/education/higher_education/accreditation/file_64166.pdf Accessed 2017-09-10

IOP Institute of Physics

The Physics Degree

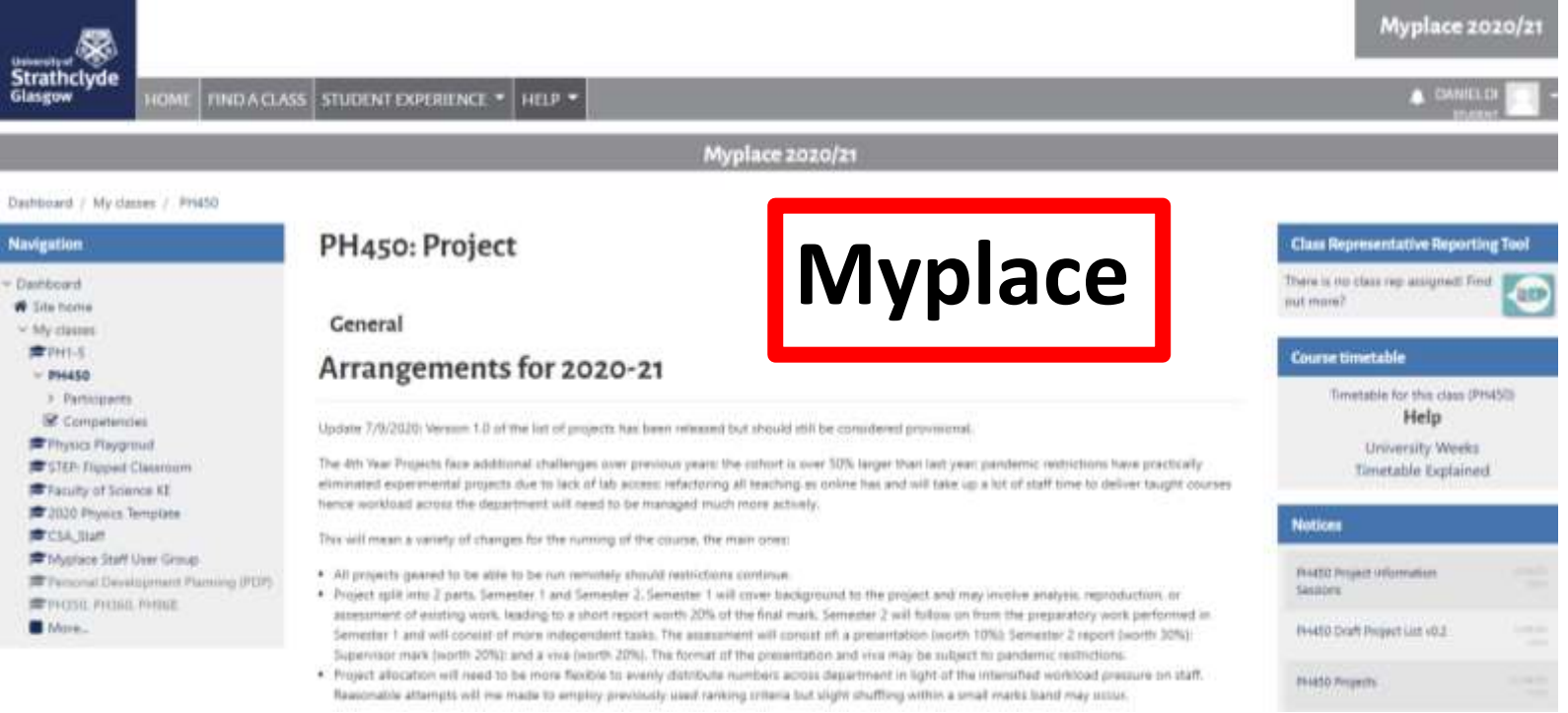
PROJECT WORK

PH450 Project
40 Credits

University of Strathclyde Science

1. BSc degree programmes must incorporate either a **project or dissertation** in the final year. Students should ***not be able to graduate without*** having carried out a project or dissertation. Integrated Masters programmes must incorporate extended project work as a substantial part of the final year. Additional requirements for integrated Masters degrees are detailed on the next page.
2. Final year project work may be undertaken individually, in pairs or in groups but degree programmes should allow students to experience both individual and group project work.
3. Projects may be ***experimental***, observational, ***computational or theoretical*** depending on the topic and the available facilities.
4. The objectives of such project work will include ***most of the following***:
    - ***Investigation*** of a physics-based or physics-related problem
    - ***Planning, management and operation*** of an investigation to test a hypothesis
    - Development of ***information retrieval skills***
    - ***Carrying out a health and safety assessment***
    - Establishment of ***co-operative working practices*** with colleagues
    - ***Design, assembly and testing*** of equipment or software
    - Generation and ***informed analysis*** of data and a critical assessment of experimental (or other) uncertainties
    - Formulation of ***appropriate conclusions and a critical comparison*** with relevant theory
    - Production of a ***final written report***
    - ***Presentation and defence*** of the results of the project

COVID-19 Restrictions! Most experimental projects infeasible.



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- PH450 Project **Information**
  - List of Projects
  - Project Preference/Selection
  - Report/Presentation Templates, Forms
  - Guidance
- **Handing In**
  - Initial Report
  - Presentation
  - Final Report

* Be familiar with University Policy on Plagiarism https://www.strath.ac.uk/plagiarism/

PH450 Schedule

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	Wk	W/C	Date	Event
Semester 1	0	14/09/2020	18/09/2020	Project Preferences Due at Noon via MyPlace
	1	21/09/2020	23/09/2020	Release of Project Allocation (Round 1)
	2	28/09/2020		
	3	05/10/2020		
	4	12/10/2020		
	5	19/10/2020		
	6	26/10/2020	28/10/2020	Safety Induction Form (if required) via MyPlace
	7	02/11/2020		
	8	09/11/2020		
	9	16/11/2020		
	10	23/11/2020		
	11	30/11/2020		
		07/12/2020		
		14/12/2020		
		21/12/2020		
		28/12/2020		
		04/01/2021		
Semester 2	0	11/01/2021	11/01/2021	**First Report** due at Noon via MyPlace (20%)
	1	18/01/2021		
	2	25/01/2021		
	3	01/02/2021		
	4	08/02/2021		
	5	15/02/2021		
	6	22/02/2021	22/02/2021	**Presentations** due at Noon via MyPlace (10%)
	7	01/03/2021		
	8	08/03/2021		
	9	15/03/2021	15/03/2021	Samples Pages for Feedback due via Supervisor
	10	22/03/2021		
	11	29/03/2021		
		05/04/2021	05/04/2021	**Final Report** due at Noon via MyPlace (30%)
		12/04/2021		
Exams		19/04/2021		**Vivas**
		26/04/2021		
		03/05/2021		
		10/05/2021		
		17/05/2021		
				Supervisor Mark (20%)

20% First Report

10% Presentation

30% Final Report

20% Viva

20% Supervisor Assessment of Overall Project Work

Note: Only final mark will be released as per Departmental Policy

Project Selection I

- Project listing on MyPlace*
- MyPlace Project Preference Form due Noon Friday 18th September 2020
- Select between **5-10 projects**
- Allocation primarily decided on **3rd year class rank** within a ~few mark band to allow for load balancing and optimising preferences (try to allocate within first 5 preferences)
- Allocation is **subject to supervisor availability** i.e. your choice may not be allocated if supervisor at full load already, and balancing across groups
- 1st Allocation announced Wednesday 23rd September 2019
- **2nd allocation round to follow if unsuccessful in 1st Round**

* PH550 students have priority, some projects may have been pre-allocated, e.g. summer students continuing to work with a research group.

Project Selection II

- Attend information sessions on projects (check schedule)
- If no information session, contact supervisor for further information
- Read the project description closely
  - **Suitability** (BSc, MPhys, etc.), Specialism
  - Pre-requisites
  - Theory, Computational*, (Experimental)
  - Look up the references
- Be tactical in your choices
  - Be realistic, play to your strengths
  - If you don't get any of your first round choices, you will have to wait until the second round

* Computational projects don't necessarily require much programming

Doing a Project I

- Ideal opportunity to develop **critical thinking** skills apply **knowledge** from other courses to study a topic in **more depth**
- Your **Supervisor**
  - A **guide**, can show you the way but it's up to you to do the work
  - May not know all the answers (but should have an idea of what it should look like)
  - **Busy** person. Help them to help you, e.g. turn up to meetings as arranged, give adequate notice if you can't, do work as agreed (e.g. written work, calculations, summaries) to schedule
- Interactions
  - Keep in **good communication** at all times
  - Develop good email habits
    - Clear subject heading (label "PH450")
    - Concise, clear, but appropriately detailed messages
    - Respond within a reasonably period
  - **Be prepared** for meetings, e.g. have a summary of progress, agenda, materials asked for
  - Keep **records** of meetings and take notes, useful to email supervisor summary of each meeting
  - Be **professional**

Doing a Project II

- Not like a taught class
  - "New knowledge", not something you can Google or read in a book*
  - The project is ultimately whatever you make of it
  - **Self-motivation** is absolutely vital, **remain engaged** with the project
  - Cannot "cram", needs consistent concerted effort
  - Spend **at least 2 days/week *on average*,** invest your time early
- Project Structure
  - Have a **project plan** and draw up a timetable
  - Set **realistic goals**, revise throughout
- Good records
  - Keep a lab book, document your code, write up calculations
- Writing Up
  - The 2 reports makes up 50% of your mark
  - **Never too early to start writing**, e.g. introduction, background, literature review
  - Give supervisor adequate time to give feedback

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