

Teaching & Learning in the School of Physics & Astronomy

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- PART 1
 - THE “WHATS” – what you could be asked to do, what are the rules etc
- PART 2
 - THE “HOWS” – examples of best practice and general advice on how to deliver your teaching, and a summary of the key University policies that must inform your approaches

- PART 1
 - Teaching timetable
 - How do you find out what you are teaching?
 - What does a “lecture” at Glasgow typically look like?
 - The duties of a course lecturer.
 - What does a “lab” at Glasgow typically look like?
 - The duties of a lab demonstrator/leader.
 - The duties of a small group supervisor.

- PART 2
 - Examples of best practice when it comes to delivering lectures and small group tutoring

PART 1: WHAT?

- Teaching duties are assigned by the School's Registrar
- You can find details of your full allocation on the School's Database
- <https://www.gla.ac.uk/schools/physics/> → Info for Staff → Staff Database
- You need a GUPHYS log in for this – which is NOT the same as your GUID.
- Then Click on Staff Database → Administer my data entry → Teaching Allocation

Contact	Personal Summary	Teaching Allocation	Workload Model	Student Projects
Check the boxes for those you wish to be public and press "Save Changes"				
22-23 (Clone previous)				
<input type="checkbox"/>	Non-Honours Undergraduate Lectures			
<input type="checkbox"/>	Physics 1: Optics, Waves and Lasers II PHYS1001			
<input type="checkbox"/>	Physics 1: Electricity, Electronics and Magnetism I PHYS1001			
<input type="checkbox"/>	Pre-University Summer School PPUSS			
<input type="checkbox"/>	Honours Undergraduate Lectures			
<input type="checkbox"/>	Peer to Peer Teaching and Learning in Physics PHYS4045			
<input type="checkbox"/>	Non-Honours Supervisions			
<input type="checkbox"/>	Physics 2: Supervisions (S1) PHYS2001			
<input type="checkbox"/>	Physics 2: Supervisions (S2) PHYS2001			
<input type="checkbox"/>	non-Honours Assessment			
<input type="checkbox"/>	Physics Communication Poster Sessions PHYS1001			
<input type="checkbox"/>	Honours Assessment			
<input type="checkbox"/>	Peer to Peer Teaching & Learning in Physics Marking PHYS5045			
<input type="checkbox"/>	Physics Education and Communication Interviews PHYS4034			
<input type="checkbox"/>	Physics Education and Communication Marking PHYS4034			
<input type="checkbox"/>	Physics Education and Communication Presentations PHYS4034			
<input type="checkbox"/>	Honours Undergraduate Laboratory			
<input type="checkbox"/>	Physics 3 Group Project: Education PHYS4021P			
<input type="checkbox"/>	Honours Workshops			
<input type="checkbox"/>	Physics Education and Communication PHYS4034			
<input type="checkbox"/>	Non-Honours Workshops			
<input type="checkbox"/>	Physics Communication Workshops PHYS1001			
<input type="checkbox"/>	New Non-Honours Undergraduate Lectures			
<input type="checkbox"/>	Physics 2: Classical and Quantum Waves PHYS2001			
<input type="checkbox"/>	21-22			
<input type="checkbox"/>	Non-Honours Undergraduate Lectures			



Teaching timetable

Semester 1	Week	Beginning	Monday	Tuesday	Wednesday	Thursday	Friday	
	0	12/09/2022	Freshers Week					
	1	19/09/2022	Teaching Weeks					
	2	26/09/2022						
	3	03/10/2022						
	4	10/10/2022						
	5	17/10/2022						
	6	24/10/2022						
	7	31/10/2022						
	8	07/11/2022						
	9	14/11/2022						
	10	21/11/2022						
	11	28/11/2022	EXAMS					
	12	05/12/2022						
13	12/12/2022	Student Vacation						
	19/12/2022							
	26/12/2022							
	04/01/2023							

Semester 2	Week	Beginning	Monday	Tuesday	Wednesday	Thursday	Friday	
	1	09/01/2023	Teaching Weeks					
	2	16/01/2023						
	3	23/01/2023						
	4	30/01/2023						
	5	06/02/2023						
	6	13/02/2023						
	7	20/02/2023						
	8	27/02/2023						
	9	06/03/2023						
	10	13/03/2023						
	11	20/03/2023						Student Vacation
		27/03/2023						
		03/04/2023						
	10/04/2023	EXAMS						
	17/04/2023							
	24/04/2023							
	01/05/2023							
	08/05/2023							
	15/05/2023							

Typical teaching times ...

LECTURES:

- Physics 1: Lectures daily at 0900 and 1300
- Astronomy 1: Lectures daily at 1000
- Exploring the Cosmos 1: Lectures daily at 1300

- Physics 2: Lectures daily at 1200
- Astronomy 2: Lectures daily at 1100

- Physics 3/4/5: Lectures daily at 0900, 1000, 1100
- Astronomy 3/4/5: Lectures Mon/Wed/Fri at 1400, 1500, 1600

LABS:

- Levels 1 and 2: ~1400-1700
- Levels 3/4/5: 1100-1700

TUTORIALS:

- Depends ...

LECTURES



- Lectures can be scheduled anytime between 0900 and 1800, Monday to Friday, through both Semesters.
- **The official lecture “hour” runs for 50 minutes from xx05 to xx55.**
 - MUST NOT exceed this 50 minute period.

- Level 1 and 2:
 - Each class has a Class Head (aka Class Co-Ordinator) and Deputy
 - Each class has a Lab Head and Deputy
 - A lab technician
 - Support from the P&A Teaching Support Team

- Level 3, 4 and 5:
 - Physics – Class Head and Deputy for Physics 3.
 - Physics – Class Head and Deputy for Physics 4/5.
 - Astronomy – Class Head and Deputy for Astronomy 3/4/5
 - Each have their own lab technician
 - Support from the P&A Teaching Support Team

The

CLASS AND LAB HEADS

are the

MOST IMPORTANT PEOPLE

for you to contact with

ANY QUESTIONS

you have about your course/allocations!



- A1/P1/A2/P2 – usually 8 or 9 lectures, usually concentrated into half semester (1 or 2 lectures a week)
 - Double teaching in Physics 1
- P3/4/5 – usually 18 lectures, running throughout S1 or S2, twice a week
- A3/4/5 – usually 27 lectures, run either in S1 or S2, or across both



- Content is **pre-determined** – you should **not** make major changes to what you plan to teach without first speaking to your Class Head.
- Each course has a Course Guide containing the Intended Learning Outcomes for the course.
- You will normally inherit a course and materials from a colleague
- HOW you deliver your lecture course is up to you, though there are some basics you are expected to provide – we'll come back to this.



- P&A lecture venues are assigned centrally – you can end up teaching ANYWHERE on campus.
- All lecture theatres contain (usually) a functioning desktop computer attached to one or two overhead projectors. Rooms also (usually) have writing surfaces of some form, and a visualiser.
- There are also facilities to connect your own laptop if you prefer.
- You can get an idea of what your lecture venue will look like, and check the facilities in any centrally controlled room, at <https://www.gla.ac.uk/myglasgow/estates/timetabling/roomphotos/>
- You can find your way around campus at <https://www.gla.ac.uk/explore/maps/>

How should I deliver my lectures?

- The School does not insist on any one particular teaching delivery method for lectures
 - We want to make sure that you are free to deliver your material in the way that suits you best.
 - We also believe it is important that students learn to learn from a range of teaching methods.
- PART 2 will look at some examples of approaches you can take.
- However ... there is a basic minimum provision level that is required.

- Anything that you teach which could be examined must be made available electronically on your course's Moodle site
 - E.g. PowerPoints, or handouts, or notes. It doesn't matter exactly what, so long as the examinable content can be accessed somewhere.
- Notes don't have to be typed – but it is good practice
- Lecture recordings are encouraged – we'll look at this in more depth in Part 2.

- If you deliver a lecture course, you will most likely need to play a role in the assessment of that course:
 - Setting exam and resit exam questions (and providing detailed worked solutions for same)
 - Setting class test questions (and providing detailed worked solutions)
 - Setting/Choosing revision questions
- You will normally be expected to mark your own questions too.

- Exam and class test questions usually contribute to student's overall course grade. As such they will go through a vetting process. Details of this vary depending on the course level:

Level 1 and 2:

- Checked by Class Head
- Checked by School's Internal Checker
- Returned to setter for adjustments/comments
- Checked by School's External Checker
- Returned to setter for final adjustments/comments

Levels 3, 4 and 5 (Honours):

- Checked by Course Moderator
- Returned to setter for adjustments/comments
- Checked by School's External Checker
- Returned to setter for final adjustments/comments

- Revision questions are usually for formative assessment only and do not need to go through checking process.
 - May inherit material from previous lecturer
 - May be able to choose from a book.

LABORATORIES



- Most of the School's courses include practical classes.
- Length and frequency of the labs varies from course to course:
 - Level 1 and 2 the labs are 3 hours long, running 2pm-5pm, weekly through both semesters every day of the week. (Students attend once per week.)
 - Level 3, labs are six hours long, running 11am-5pm, on Tuesdays and Thursdays, in S1 or S2. (Students attend all sessions.)
 - Level 4 and 5, projects replace lab classes
- Labs are typically staffed by ...
 - Academic members of staff – usually in overall charge of a team of demonstrators
 - PDRAs and Postgrad students – acting as the demonstrators

Duties associated with labs

- VERY lab-specific so pay attention to the guidance and training you get from your Lab Head.

Remember ...

The

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ANY QUESTIONS

you have about your course/allocations!

Duties associated with labs

- VERY lab-specific so pay attention to the guidance and training you get from your Lab Head.
- Broadly, though ...
 - Offering guidance in the lab to students
 - Assisting with training of new demonstrators (once you're up to speed yourself)
 - Marking lab work
 - Mark lab reports

SMALL GROUP TUTORIALS



Small group teaching: Supervisions

- The frequency of meetings varies from class to class, so again make sure you get guidance from your Class Head.

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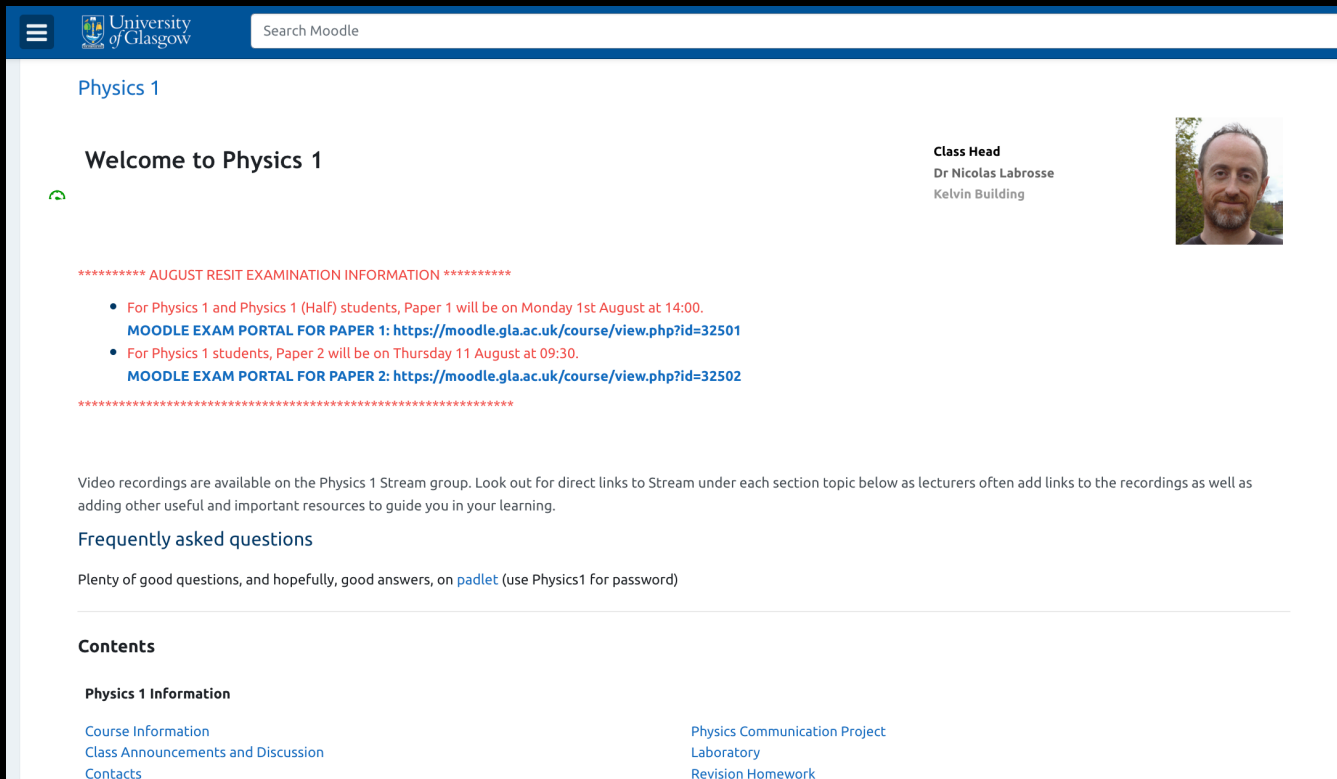
you have about your course/allocations!

- Frequency of meetings varies from class to class.
- Supervision sessions are offered to physics and astronomy students in levels 2 and up.
- Individual supervisors are assigned one or more groups of ~6 students.
- Your role is to help the students revise material they have met in lectures – you aren't teaching new material here, just helping them absorb it.
- Sessions are usually an hour, scheduled by the Supervisor.
- You may also be asked to cover class tutorials – these usually run within the lecture timetables – Class heads would give you the specifics.

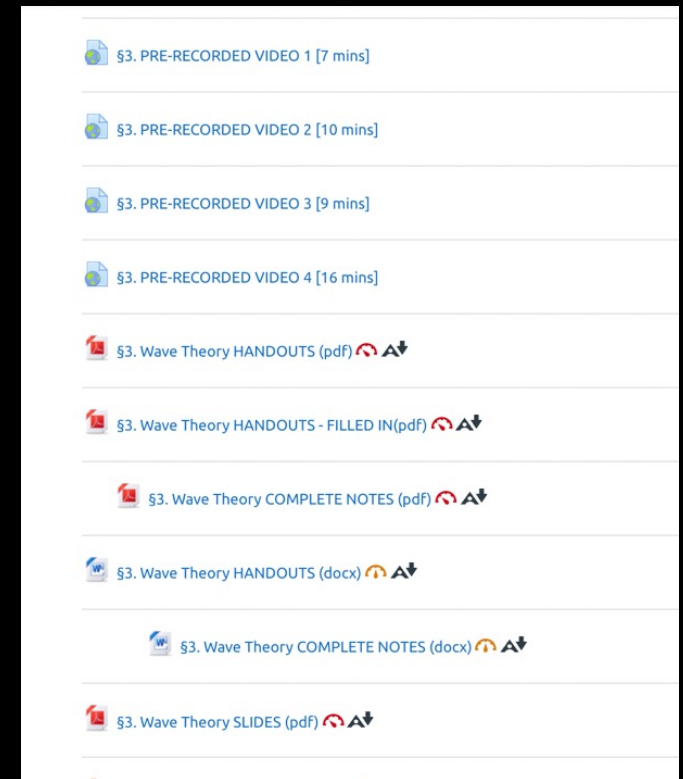


- Moodle is a Virtual Learning Environment
- Every P&A course has it's own dedicated site.
- In its most basic form, it can be used as a repository for files, and a means to communicate with students.
- Can also be used for making assessment submissions, setting tests and revision exercises and more.
- Your class head will enrol you on to the site

- Example: Physics 1: <https://moodle.gla.ac.uk/course/view.php?id=4311>



The screenshot shows the Moodle course page for Physics 1. At the top, there is a search bar and the University of Glasgow logo. The course title "Physics 1" is displayed. Below the title, there is a "Welcome to Physics 1" message and a profile picture of the Class Head, Dr Nicolas Labrosse, with his name and location (Kelvin Building) listed. A red asterisk message provides information about the August resit examination, including dates and links to the Moodle exam portals for Paper 1 and Paper 2. Below this, there is a paragraph about video recordings being available on the Physics 1 Stream group. A "Frequently asked questions" section mentions a padlet for questions and answers. At the bottom, there is a "Contents" section with links for "Physics 1 Information", "Course Information", "Class Announcements and Discussion", "Contacts", "Physics Communication Project Laboratory", and "Revision Homework".



The screenshot shows a list of course content items. The items are:

- §3. PRE-RECORDED VIDEO 1 [7 mins]
- §3. PRE-RECORDED VIDEO 2 [10 mins]
- §3. PRE-RECORDED VIDEO 3 [9 mins]
- §3. PRE-RECORDED VIDEO 4 [16 mins]
- §3. Wave Theory HANDOUTS (pdf) [A+]
- §3. Wave Theory HANDOUTS - FILLED IN(pdf) [A+]
- §3. Wave Theory COMPLETE NOTES (pdf) [A+]
- §3. Wave Theory HANDOUTS (docx) [A+]
- §3. Wave Theory COMPLETE NOTES (docx) [A+]
- §3. Wave Theory SLIDES (pdf) [A+]

- Lectures – run for 50 minutes
- Labs – run for ~3 hours per session in non-Honours; ~5-6 hours per session in Honours
- Tutorials – run for an hour

- Lecture assignments are (normally) accompanied by a requirement to provide exam questions

- Lab assignments are (normally) accompanied by a requirement to mark lab books and reports.

- Tutorials/Supervision sessions accompanied by a need to provide formative assessment.

“Formative assessment”: For revision purposes only

“Summative assessment”: Counts to a student’s grade

Up next ...

- Wednesday 23rd August 1100-1200: Lectures – Part 1
- Monday 28th August 1100-1200: Lectures – Part 2
- Wednesday 30th August 1100-1200: Small Group Tutoring
- Monday 4th September 1100-1200: Lab Demonstrating, Providing Feedback and Self-Reflection