Imperial College London

Module Specification (Curriculum Review)

Basic details

			Earliest cohort	Latest cohort
UID		Cohorts covered	2023-24	

Long title	Communicating Physics
New code	PHYS50005
New short title	Communicating Physics

Brief description of module *(approx. 600 chars.)*

Communicating Physics is an elective available to physics undergraduate students in Year 2 of their degree. Students spend one morning or afternoon per week during term 2 in a local school, supporting teaching whilst gaining experience of the science education children experience. While at the school, students implement a teaching project targeted at a specific physics concept or activity for which there is a perceived need in the school. Students keep a diary of their time, deliver an oral presentation at the end of term to their peers on their time at the school and submit a formal report on their teaching project.

626 characters

Available as a standalone module/ short course? N

Statutory details

	ECTS	CATS	Non-credit		
Credit value	5	10	N	HECOS codes	

FHEQ level 5

Allocation of study hours

	Hours	
Lectures	0	
Group teaching	10	*Incl. seminars, tutorials, problem classes.*
Lab/ practical	0	
Other scheduled	30	*Incl. project supervision, fieldwork, external visits.*
Independent study	85	*Incl. wider reading/ practice, follow-up work, completion of assessments, revisions.*
Placement		*Incl. work-based learning and study that occurs overseas.*
Total hours	125	
ECTS ratio	25.00	

Project/placement activity

Is placement activity allowed? No

Module delivery

Delivery mode	Taught/ Campus	Other	
Delivery term	Year-long	Other	

Ownership

Primary department Physics

Additional teaching departments	None
Delivery campus	South Kensington

Collaborative delivery

Collaborative delivery?	N

External institution	N/A
External department	N/A
External campus	N/A

Associated staff

Role	CID	Given name	Surname
Module Leader		Mark	Richards
		Kayleigh	Murphy

Learning and teaching

Module description

Learning outcomes	On completion of this module you will be able to: • work cooperatively with teachers, technicians and pupils in a school environment. • plan and teach part or the whole of a science lesson in a school with support from a host teacher • identify an area of your host school's learning and teaching environment to which you can make some improvement and design and carry out a teaching project to implement this. • critically analyse your own and others' teaching sessions, identifying strengths and areas for improvement. • provide verbal and written analysis of your experiences to an audience of peers and academics.
Module content	Prior to starting your placement you will receive information and training on types of school in the UK, guidance on behaviour as a guest in a school environment, including ethical and safe practice and hints and tips on lesson planning and delivery. During the placement most of your own learning will come in the classroom with guidance from the host teacher and an academic guide; this will be bespoke as the exact environment you are in will determine the areas in which you will most benefit from guidance. At Imperial, there will be a support tutorial providing guidance on how to deliver the project and how to maximise the benefits you gain from your time at the school.
Learning and Teaching Approach	You will need to apply to take Communicating Physics and pass a short interview where you are asked to deliver a short teaching session to the panel. The teaching starts here as the panel provide you with feedback on the strengths and areas for improvement via this exercise. On the first day of term 1, the module has a training day with teaching experts both from Imperial and outside the College delivering interactive sessions on teaching tips and best practice, plus former Communicating Physics students sharing their experiences from the year before. Once schools have been allocated, you are assigned an Academic Guide who acts as a personal tutor for the module. They will help you at Imperial with the project and will also come and observe you teach one session at the school and subsequently provide you with rich and detailed guidance as feedback.

Assessment Strategy	Summative assessment for the module comprises four parts: 1. A journal of teaching activity, worth 20% completed as a series of diary entries in the student's own time. 2. An end-of-module report (4000-word upper limit) detailing the project you have implemented during your placement, worth 40%. 3. A 10-12-minute presentation on your experience in the classroom, worth 25%. 4. A teacher evaluation, worth 15%. This is completed entirely by the host teacher and requires no administrative input by the student. In addition you must complete a progress questionnaire in week 4 of term 2; this is compulsory to submit but does not count towards the grade.
Feedback	Formative feedback is provided in real time by the host teacher(s) and occasionally other staff in the school - they are very used to seeing people starting out in teaching and able to provide deep insight at each session. In addition, the academic-guide visit will provide you with valuable input. Peer feedback comes from the two timetabled tutorials where sections of the sessions are dedicated to open group discussion on ongoing experiences; in addition, we run an optional-attendance mixer event with past course graduates who share their experiences.
Reading list	• Teaching Secondary Physics by David Sang • ASE guide to secondary science education by Martin Hollins

Quality assurance

Date of first approval	
Date of last revision	
Date of this approval	
Module leader	Mark Richards

Office use only

QA Lead	
Department staff	
Date of collection	
Date exported	
Date imported	

Notes/ comments	

Template version 16/06/2017

Programme structure

Associated modules

UID	Legacy code	Module title	Requisite type

UID	Legacy code	Module title	Requisite type

Assessment details

		Pass mark
Grading method	Numeric	40%

Assessments

Assessment type	Assessment description	Weighting	Pass mark	Must pass?
Coursework	Progress questionnaire	0%	N/A	Y
Coursework	Journal	20%		N
Practical	Oral presentation	25%		N
Coursework	Formal report	40%		N
Practical	Host-teacher assessment	15%		N
		100%		