

2020/1 - PHY-4001Y ELECTROMAGNETISM, OPTICS, RELATIVITY AND QUANTUM MECHANICS

Full Year, Level 4 module
(Maximum 40 Students)

UCU: 20 Organiser: Dr Magnus Borgh

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Examination with Coursework or Project

Timetable Slot:E1\, H3\

Exam Paper(hrs):2

This module gives an introduction to important topics in physics, with particular, but not exclusive, relevance to chemical and molecular physics. Areas covered include optics, electrostatics and magnetism and special relativity. The module may be taken by any science students who wish to study physics beyond A Level.

2020/1 - PHY-4004Y ACOUSTICS AND LABORATORY IN PHYSICS

Full Year, Level 4 module
(Maximum 32 Students)

UCU: 20 Organiser: Professor Stephen Ashworth

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type:

Timetable Slot:BR

One half of the module will cover the physics of acoustics, especially with relation to music and musical instruments. The Matlab programming environment will be introduced and used to analyse a series of sounds. These analyses will form the basis for a written report on those sounds. The other half of the module will be a practical laboratory. A variety of experiments will be carried out and the data analysis written up in report format.

2020/1 - PHY-5003Y TOPICS AND LABORATORY IN PHYSICS

Full Year, Level 5 module
(Maximum 37 Students)

UCU: 20 Organiser: Dr Martin Loftus

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Coursework

Timetable Slot:U

Exam Period:SPR-02

This module explores physics as an empirical science through a series of laboratory experiments that probe key concepts and physical laws. The laboratory sessions will be underpinned by associated teaching surrounding the studied phenomena, and will complement topics addressed in other modules in the physics course.

2020/1 - PHY-6001Y THE PHYSICS OF THE UNIVERSE

Full Year, Level 6 module
(Maximum 50 Students)

UCU: 20 Organiser: Dr Robert Ferdman

(PGR) Module - 40% pass mark on Aggregate

Module Type: Examination with Coursework or Project

Timetable Slot:U

In this module you will apply physics concepts and mathematical techniques to discover the astrophysics that govern the Universe at various scales, in both time and space. This includes stellar structure and evolution; stellar systems and populations; our Milky Way, other galaxies, and galactic systems; and the early Universe. You will also learn about the observational tools such as telescopes and detectors.

2020/1 - PHY-6002Y ADVANCED TOPICS IN PHYSICS

Full Year, Level 6 module
(Maximum 35 Students)

UCU: 20 Organiser: Dr Magnus Borgh

Module Type: Examination with Coursework or Project

Timetable Slot:BB

Exam Paper(hrs):

On this module you will study a selection of advanced topics in classical physics that provide powerful tools in many applications as well as provide a deep theoretical background for further advanced studies in both classical and quantum physics. The topics include analytical mechanics, electromagnetic field theory and special relativity. Within this module you will also complete a computational assignment, developing necessary skills applicable for computations in many areas of physics

2020/1 - PHY-6003Y ADVANCED PHYSICS LABORATORY

Full Year, Level 6 module
(Maximum 35 Students)

UCU: 20 Organiser: Dr Martin Loftus

Module Type:

Timetable Slot:F2,\A2

BEFORE TAKING THIS MODULE YOU MUST TAKE PHY-5003Y

This module explores concepts in physics through a series of advanced laboratory experiments, working in teams. The experiments are underpinned by associated teaching in

other modules of the Physics course.

2020/1 - PHY-6004Y PHYSICS PROJECT

Full Year, Level 6 module
(Maximum 30 Students)

UCU: 40

Organiser: Dr Robert Ferdman

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type:

Timetable Slot: UNKNOWN

Exam Period: SPR-02

This individual research module is compulsory for all students registered on a Physics degree. It comprises supervised research in at least one area of physics. It may involve research partners in other Schools at UEA. The project can involve collection and analysis of data in the laboratory or from a telescope, and/or development of a piece of equipment, and/or development of software or a theoretical/numerical model, and/or analysis of pre-existing data from a variety of sources. It must include independent scientific analysis. It will be assessed by a written report, a presentation, and an online research journal maintained throughout the project.