2019/0 - PHY-4001Y ELECTROMAGNETISM, OPTICS, RELATIVITY AND QUANTUM MECHANICS

Full Year, Level 4 module
(Maximum 40 Students)
UCU: 20 Organiser: Dr Magnus Borgh
MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:E1\, H3\
Exam Paper(hrs):2

You will be introduced to important topics in physics, with particular, but not exclusive, relevance to chemical and molecular physics. You will cover areas including optics, electrostatics and magnetism and special relativity.

2019/0 - PHY-4002Y ASTROPHYSICS,ACOUSTICS AND ADDITIONAL SKILLS

Full Year, Level 4 module
(Maximum 40 Students)
UCU: 20 Organiser: Dr Martin Loftus
MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework
Timetable Slot:B2,A1,E2/C3

This module explores the physics behind the generation and reception of music. You will be provided with an introduction to the fundamental principles of astrophysics, and will use these to explore a variety of astrophysical phenomena. You'll be introduced to the topics of uncertainties, accuracy and ethical behaviour in physics. You'll learn about acoustics, sound measurement and analysis, including more widely applicable concepts such as the behaviour waves and analysis using Fourier series. You will also study aspects of astrophysics including the history of astrophysics, radiation, matter, gravitation, astrophysical measurements, spectroscopy, stars and some aspects of cosmology. You will learn to predict differences between idealised physics and real life situations. You'll also improve your skills in problem solving, written communication, information retrieval, poster design, information technology, numeracy and calculations, time management and organisation.

2019/0 - PHY-5003Y TOPICS AND LABORATORY IN PHYSICS

Full Year, Level 5 module
(Maximum 20 Students)
UCU: 20 Organiser: Dr Martin Loftus
MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework and Assessment of Practice
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. Your laboratory sessions will be underpinned by associated teaching surrounding the studied phenomena, and will complement topics addressed in other modules in the physics course.

2019/0 - PHY-6001Y THE PHYSICS OF THE UNIVERSE

Full Year, Level 6 module
(Maximum 50 Students)
UCU: 20 Organiser: Dr Robert Ferdman
MODULE - 40% PASS 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.

2019/0 - PHY-6003Y ADVANCED PHYSICS LABORATORY

Full Year, Level 6 module
(Maximum 35 Students)
UCU: 20 Organiser: Dr Martin Loftus
MODULE - 40% PASS ON AGGREGATE
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.

2019/0 - PHY-6004Y PHYSICS PROJECT

Full Year, Level 6 module
(Maximum 30 Students)
UCU: 40 Organiser: Dr Robert Ferdman
MODULE - 40% PASS ON AGGREGATE
Module Type:
Timetable Slot:UNKNOWN
Exam Period:SPR-02

This individual research module 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 a web log maintained throughout the project.