

MODULE LECTURERS (2019/2020)

Physics Foundation Year (level 3)

Semesters 1 & 2 (S1 & S2)

Foundation Physics A [*S1 Heather M Yates + S2 Graham S McDonald*]

Foundation Physics B [*S1 Richard Pilkington + S2 Marina Leontiadou*]

Foundation Physics Laboratory [*S1 Marina Leontiadou + S2 Laura Martinez Maestro*]

Foundation IT and Study Skills [*Richard D Pilkington and Ian Morrison*]

Semester 1

Foundation Mathematics 1 [*Salem Ameen*]

Semester 2

Foundation Mathematics 2 [*Salem Ameen*]

Physics First Year (level 4)

Semesters 1 & 2 (S1 & S2)

Fundamentals of Physics A [*S1 Ian Morrison + S2 John E Proctor + Labs by S1 Bull / S2 Yates*]

Fundamentals of Physics B [*Dan J Bull + Labs by S1 Dan J Bull / S2 Heather M Yates*]

Fundamentals of Physics C [*S1 MA Hughes + S2 LM Maestro + Labs by S1 Bull / S2 Proctor + S Astin*]

Fundamentals A, B & C Tutorials by S1 John E Proctor + S2 John E Proctor + Ian Morrison

Frontiers of Physics and Entrepreneurial Skills [*Richard D Pilkington + Ian Morrison*]

Semester 1

Mathematics [*Graham S McDonald*]

Semester 2

Mathematics and Computing [*Graham S McDonald (theory) + Dan J Bull (computing labs)*]

Within the Pure and Applied Physics degree, the above two Mathematics modules are replaced by:
Pure and Applied Mathematics for Physics and Pure and Applied Mathematics and Computing [*Graham S McDonald + PAP Computer-Aided Learning by Stuart Astin*]

Physics Second Year (level 5)

Semesters 1 & 2 (S1 & S2)

Physics Laboratory [*S1 Marina Leontiadou + S2 Richard D Pilkington*]

Computing Laboratory [*S1 Stuart Astin + S2 Dan J Bull*] †

Classical and Quantum Waves [*S1 James Christian + S2 Ian Morrison*]

Mathematical Methods and Applications [*S1 Graham S McDonald + S2 Tiehan Shen*]

Properties of Matter [*S1 Dan J Bull + S2 Mark A Hughes*]

Physics of the Universe [*Keith Robinson*] †

† or Acoustics option: Digital Signal Processing [*Duncan Williams*]

or Acoustics option: Principles of Acoustics [*Olga Umnova*] or Foreign Language

Physics BSc Third Year (level 6)

Semesters 1 & 2 (S1 & S2)

Nuclear and Particle Physics [*S1 John E Proctor + S2 Ian Morrison*]

Maxwell's Equations and Wave Optics [*Tiehan Shen*]

Quantum Mechanics of Atoms, Molecules and Solids [*S1 Ian Morrison + S2 Dan J Bull*]

Physics Project - 40 Credits [*Richard D Pilkington*] ††

Photonics and Nano-technology [*S1 James M Christian + S2 John E Proctor*] †

† or Physics option: Theoretical Physics [*James M Christian*]

or Acoustics options: Speech and Musical Acoustics [*S1 Trevor J Cox*]

Computer Simulation for Acoustics [*S2 Jonathan Hargreaves*]

†† Short Project – 20 Credits [*Richard D Pilkington*]

Physics MPhys Third Year (level 6)

Semesters 1 & 2 (S1 & S2)

Nuclear and Particle Physics [*S1 John E Proctor + S2 Ian Morrison*]

Maxwell's Equations and Wave Optics [*Tiehan Shen*]

Quantum Mechanics of Atoms, Molecules and Solids [*S1 Ian Morrison + S2 Dan J Bull*]

Short Project [*Richard D Pilkington*]

Theoretical Physics [*James M Christian*]

Photonics and Nano-technology [*S1 James M Christian + S2 John E Proctor*] †

† or Acoustics options: Speech and Musical Acoustics [*S1 Trevor J Cox*]

Computer Simulation for Acoustics [*S2 Jonathan Hargreaves*]

Physics MPhys Fourth Year (level 7)

Semesters 1 & 2

Research Project [*Richard D Pilkington + Heather M Yates*]

60 credits

Semester 1

Advanced Quantum Mechanics [*Ian Morrison + Tiehan Shen*]

30 credits

Semester 2

Thin Films and Materials Characterisation [*John E Proctor + Heather M Yates + Tiehan Shen + Labs by Richard D Pilkington*]

30 credits