Physiological Science at Bristol
Our courses

BSc Physiological Science, 3 years B120
MSc Physiological Science, 4 years B122
MSc Physiological Science with Study in Industry*, 4 years
*Entry by transfer

Watch our film about studying physiological science at Bristol and meet some of our students.

bristol.ac.uk/physiology
Year 1

Six units = 120 credits

**Mandatory units:**
- Understanding Body Function A
- Understanding Body Function B
- Pharmacology 1A

Plus three options from:
- Introduction to Neuroscience
- Functional Neuroanatomy
- Biochemistry
- Pharmacology
- Psychology 1B
- Anatomical Science
- The Science of Happiness

Available units may be subject to change and options may depend on timetabling.
Year 1 example

First year units typically have three to four lectures, tutorials or workshops a week and one practical class.

Example from a first-year practical on respiratory physiology, measuring the gas content of alveolar air.

[Image of a student performing a laboratory experiment and a diagram of the respiratory system]
Year 2

6 units - 120 credits
Mandatory Units:
- Neurophysiology
- Cellular Physiology
- Integrative Physiology
- Biomedical Research, Employability and Enterprise skills (see next slide)

Plus two options from:
- Human anatomy (2 units)
- Pharmacology of Body systems
- Molecular genetics
- Pharmacology of Nervous system
- Techniques in Neuroscience

One optional unit can be an open unit, which includes: modern language units, Big Ideas in Science or a first-year unit e.g. psychology.

Available units may be subject to change.
Biomedical research, enterprise and employability skills

Mandatory for all biomedical science students, this unit aims to:

▪ Equip students with a range of important transferable skills, including communication skills, collaborative work and reflective practice.

▪ Enhance understanding of scientific method and statistical analysis and an appreciation of the scientific literature.

▪ Interview and C.V. particularly useful for students applying for placements in industry and internships.

Year 2 marks will contribute 25 per cent toward your final degree mark.

Assessments vary between units but most combine marks from coursework and exams.
Year 3

Following year 2 routes vary depending on the course.

BSc Physiological Science
Year 3 = final year

MSci Physiological Science
Year 3

MSci Physiological Science with Study in Industry
Year 3 = year in industry

Year 4 (final year)

Year 4 (final year)

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Year 3

- Three units from a choice of topics including:
  - The Heart in Health & Disease
  - New Horizons in Medicine
  - Neuroscience of Pain
  - Cardiovascular System
  - Brain & Behaviour
  - Rhythms of Life
  - Or one optional pharmacology unit

Seminar course in Concepts and Skills

Experimental research project
A supervised project, with options including: project within a research laboratory; data analysis project; teaching project; public engagement project; literature-based project.

Available units may be subject to change.

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Research projects

Examples of previous research projects:

▪ Modulation of synaptic plasticity by muscarinic acetylcholine receptors
▪ Mapping pheromonal responses in the brain
▪ Intracellular calcium handling by atrioventricular nodal and atrial cells.
▪ Does the human patient simulator exhibit an increase in pulmonary vascular resistance in response to simulated ascent to altitude?
▪ Investigating links between physical activity and wellbeing.
▪ Perceptions of sex and gender, physiological and classical perspectives

MSci students do not take a lab-based project in year 3.

Year 3 mark contributes 75 per cent toward the final degree. Assessments comprise unit exams and coursework; research project (dissertation, talk and supervisor assessment).

Available units may be subject to change.

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Year 4

- Advanced project planning
- 14-week full-time research project
- Advanced creative communication
- Ideas and Enterprise

Focus is on:
- Project planning and execution
- Group work
- Communication skills

Assessment is through coursework entirely.

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Benefits of a year in industry

- Experience how the biomedical industry operates.
- Explore whether you would enjoy full-time research.
- Gain new skills: teamwork, target setting and meeting deadlines.
- Financial benefits.

Students apply for placements during year 2 and complete the placement in year 3.

On their return in year 4 they write a report on the work they have completed and present it as a poster.

They then complete their final year taking the same units as year 3 for the other courses and write a grant proposal in place of the third-year research project.

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Physiological Science at Bristol: resources

- Human Patient Simulator - Athena
- Virtual microscope
- eBiolabs
- Online resources to support practical teaching.
- Bristol Futures personal development planning

Programme enhancement activities:
A series of activities to engage students with staff and each other early in their degree and follow-on activities to enhance learning around your subject area:
- Interview a member of staff
- Unconscious bias training
- Online numeracy quizzes
- The Great Debate – Nobel prize winner

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Why study physiological science at Bristol?

We bring together scientists from across Bristol, from other departments and hospitals for regular meetings and public lectures.
Research underpins our teaching.

We specialise in the study of:
- Learning and memory
- Cardiovascular physiology
- Sensory physiology/neuroscience pain
- Cell motility and movement
- Neuropsychiatric disorders

We’re based in one of Britain’s coolest cities.

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Why study physiological science at Bristol?
We limit our intake to 30 to 80 students per year on each degree course.
This offers several advantages including:
▪ Good staff: student ratio
▪ Strong communication between staff and students
▪ Good pastoral care
▪ You can’t hide!
▪ We’ll monitor your attendance at practical and tutorials.
We scored 100 per cent in the National Student Survey for ‘Staff are good at explaining things.’

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Student societies

University of Bristol Neuroscience Society
Family / home system for academic and pastoral help
Picnics and BBQs, pub quizzes, academic speakers and the Neuroscience Ball.

Neuroscience Society

PhysPharmSoc
Parenting scheme for academic and pastoral help
Guest lectures and social events
Netball team
Interview workshops and help for students applying to industrial placements.

PhysPharmSoc

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