

Subject specific learning outcomes

Specific skills and knowledge appropriate to the degree title

In addition to the core learning outcomes specified in the Degree Accreditation Handbook, specific outcomes have been developed by Learned Societies across the key areas of the biosciences.

Degrees using 'Physiology' in their title:

The **Physiological Society** suggests that the graduates of a physiology degree programme should possess the following subject specific skills and knowledge

- Describe and explain the relationship between the molecular, cellular and tissue structure of each body system and relate this to their different functions and physiological roles in health and disease
- explain the concept and importance of maintaining physiological homeostasis at the cellular, system and organismal level, and the consequences of homeostatic imbalance in disease
- describe how cells communicate with each other, the concepts of positive and negative feedback between cells, and the importance of these processes in the maintenance of physiological homeostasis
- explain the principles of collecting physiological data, and apply practical skills in either human or animal models both *in vivo* (e.g. ECG, spirometry, nerve conduction) and *ex vivo* (e.g. isolated tissue experiments, cell culture, haemolysis assays, molecular biology techniques)
- analyse physiological data (e.g. electrophysiological signals, fluorescence images) using appropriate data handling and statistical methods, and demonstrate an awareness of the ethical and legal issues that relate to collecting physiological data from human and animal subjects