
BS1050 From Individuals to Populations - An Introduction to Genetics

Academic Year: 2021/2
Module Level: Year 1
Scheme: UG
Department: Biological Sciences
Credits: 15

Student Workload (hours)

Synchronous Lectures	1
Synchronous Small Group Teaching	6
Synchronous Practical Classes/ Workshops/Professional Placements	12
Synchronous Other	22
Asynchronous Lectures/Presentations	22
Asynchronous Other	
Guided Independent Study	79
Total Module Hours	150

Period: Semester 2
Occurrence: E
Coordinator: Ezio Rosato
Mark Scheme: UG Module Mark Scheme

No.	Assessment Description	Weight %	Qual Mark	Exam Hours	Ass't Group	Alt Reass't
001	Blackboard test	30				
002	End of Module Assessment (open book)	60		2		
003	Engagement mark	10				

Intended Learning Outcomes

On successful completion of the module, students should be able to:

- Explain how chromosomes are inherited through mitosis and meiosis and how genetic variation is generated.
- Perform elementary genetic analyses.
- Perform elementary statistical analyses.
- Recognise genetic diseases and genetically influenced disorders and appropriate methods of screening.
- Explain genetic variation and methods to measure it.
- Explain what factors influence global patterns of genetic diversity.
- Describe basic elements of molecular evolution of genes and genomes
- Define DNA sequencing technologies and their use in modern genetics
- Demonstrate competence in data analysis

Teaching and Learning Methods

A combination of synchronous and asynchronous delivery methods including slides presentations, exploration of specific topics, general summaries, tutor-led review sessions, problem solving and experimental analyses.

Assessment Methods

Coursework assessment and examination. Students earn engagement marks (10%) by submitting 5 out of 6 formative assessments (or 80% of the due number if they have mitigating circumstances).

Pre-Requisites
Co-Requisites
Excluded Combinations
Guided Independent Study: Indicative Activities

Preparing for and revising all synchronous and asynchronous material delivered through the module. Consulting textbooks to improve and widen understanding. Preparing for and producing coursework. Preparing for the final examination.