

Summary Information

Module Code	5201NATSCI
Formal Module Title	Research Skills and Employability
Owning School	Biological and Environmental Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
William Swaney	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Ross Macleod	Yes	N/A
Susanne Zajitschek	Yes	N/A
Laura Aldridge	Yes	N/A
Robbie Rae	Yes	N/A
Torsten Wronski	Yes	N/A
Jonathan Bielby	Yes	N/A
Nicola Koyama	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
--------------	--------------------------	-----------

Teaching Responsibility

LJMU Schools involved in Delivery
Biological and Environmental Sciences

Learning Methods

Learning Method Type	Hours
Lecture	10
Online	16
Tutorial	5
Workshop	22

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To develop understanding of the principles of data analysis and the application of current statistical software and tools. To develop a clear understanding of suitable potential graduate careers and of a defined potential career plan.
-------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Understand the scientific method and the principles of good experimental design
MLO2	Use modern statistical tools to evaluate data, choose and apply appropriate analysis methods and interpret results
MLO3	Demonstrate understanding of scientific rigour and standards of good scholarly practice
MLO4	Demonstrate an understanding of the skills, attributes and experiences required for a career in the scientific sector or an alternative graduate role/sector.
MLO5	Apply the practices of reflection and self-analysis to career development and explore graduate careers that meet own aspirations.

Module Content

Outline Syllabus

Principles of experimental design; Data analysis including: data properties and test assumptions, data transformation, ANOVA, post-hoc tests and the problem of multiple comparisons, correlation, non-parametric tests, regression, general linear models, generalized linear models
Employability and professional skills for science graduates: CV preparation, job applications, project management and enterprise skills. Career planning, including: self-reflection on personal motivations and aspirations; job sector and organisation research; job requirements and career progression including management roles; mapping skills, knowledge and experience; identifying professional strengths and weaknesses; professional development

Module Overview

This module covers all aspects of handling and analysing scientific data and the development of employability/graduate skills. You will consider the fundamentals of analysing and interpreting scientific data using examples relevant to all biosciences. Additionally, it will allow you to prepare a better career plan in science, as well as becoming self-aware of your employability skills.

Additional Information

This module covers data properties and fundamental principles of handling and analysing scientific data using examples relevant to all biosciences. This module will also explore the employability and graduate skills and enable students to develop career plans and awareness of their own professional potential.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Test	Stats Workshop	50	0	MLO2, MLO1
Portfolio	Employability Portfolio	40	0	MLO5, MLO4
Portfolio	Tutorial portfolio	10	0	MLO4, MLO3