Module Proforma

Approved, 2022.02

Summary Information

Module Code	7161SPOSCI
Formal Module Title	Physiological Assessment
Owning School	Sport and Exercise Sciences
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Benjamin Edwards	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Rob Erskine	Yes	N/A
Thomas O'Brien	Yes	N/A
Dominic Doran	Yes	N/A
Timothy Donovan	Yes	N/A
David Low	Yes	N/A
Neil Chester	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings

Teaching Responsibility

LJMU Schools involved in Delivery
Sport and Exercise Sciences

Learning Methods

Learning Method Type	Hours
Lecture	6
Practical	38

Module Offering(s)

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

Aims and Outcomes

Aims	To produce a "Thinking Practitioner." We will provide students with structured and progressive training, and challenge the student's understanding to enable critical thinking about the choice of laboratory equipment to test for key physiological measures and the limitations of the information derived. To support the Thinking Practitioner concept, extensive practical training will be undertaken in fundamental exercise physiology measurements. Sessions typically include a lead lecture covering the theoretical underpinnings of each method followed by practical training. Student engagement is essential, it is expected that students will take part in both conducting (i.e. experimenter) and performing (i.e. participant) exercise tests. To consolidate knowledge, data collected during the physiological tests is subsequently used in the research methods module to assist teaching of statistical research methods.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Demonstrate aptitude and an ability to operate at a professional level in laboratories or other complex/specialised contexts
MLO2	Apply, report and interpret statistical analyses of quantitative data
MLO3	Critically evaluate the effectiveness of advanced methodologies and use evidence to select approaches that are the most appropriate
MLO4	Develop critical responses to existing theoretical discourses, methodologies or practices and suggest new concepts or approaches
MLO5	Accurately and effectively communicate complex scientific information

Module Content

Outline Syllabus
Health and safety and risk assessmentAnaerobic performance (e.g. Wingate cycle ergometry, non-motorised treadmill sprinting)Skeletal muscle performance (e.g. isometric and isokinetic dynamometry)Maximum aerobic capacityEchocardiographyBlood collection and handling.Exercise biochemistry (e.g. blood metabolites)Reporting and explaining data to academic and client based populations.

Module Overview

Additional Information

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Lab report	60	0	MLO4, MLO2, MLO1, MLO3
Practice	Test and feedback to a client	40	0	MLO2, MLO1, MLO5