Module Proforma

Approved, 2022.02

Summary Information

Module Code	6105STATS
Formal Module Title	Statistics in the Workplace
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Ian Malabar	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Ian Jarman	Yes	N/A
Elon Correa	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	11
Practical	22
Tutorial	22

Module Offering(s)

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

Aims and Outcomes

Aims	This module aims to give students an experience of campus-based work related learning focusing on the role of a statistician in industry and how statistical methods are applied in both manufacturing and business.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Define the many roles of a Statistician in industry. – e.g. Financial Statistician, Risk Analyst, etc.
MLO2	Solve work-based problems using any necessary statistical techniques and tools.
MLO3	Critically evaluate and analyse problem results in terms of industry requirements.
MLO4	Communicate outcomes in a formal scientific manner (either written or verbal).

Module Content

Outline Syllabus
It is anticipated that there will be a minimum of two case studies per delivery of the module, but this may vary as case studies are developed. Generally, each project/case study will have the format:Role of the Statistician in industry; problem definition (including data requirements, knowledge requirements, etc.); importance of the problem within the company; possible solution strategies (vague outline for discussion); report/presentation requirements.Examples of such projects/case studies include:Financial Statistics e.g. Actuarial problems.Risk Analysis.Medical Statistics in the Drugs industry.Statistical process control in manufacturing.Forensic statistics.Recommender Systems.

Module Overview
This module aims to give you an experience of campus-based work related learning focusing on the role of a statistician in industry and how statistical methods are applied in both manufacturing and business.

Additional Information
Real projects derived from the work setting will be used as case studies to enable students to use their statistical knowledge and skills to solve real-world problems. Actual work-place data and constraints will be used to simulate work problems. Indicative references will depend specifically on the case studies being developed.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Portfolio	Portfolio	100	0	MLO2, MLO3, MLO4, MLO1