PS938-15 Integrated Behavioural and Data Science

24/25

Department
Psychology
Level
Taught Postgraduate Level
Module leader
Thomas Hills
Credit value
15
Module duration
10 weeks
Assessment
100% coursework
Study location
University of Warwick main campus, Coventry

Description

Introductory description

The module will bridge the gap between data science and behavioural science, giving students examples of what researchers do in the combined area of behavioural and data science. Students will hear presentations from leaders in the field and learn how this work was created, from inspiration to publication. Students will also learn how to frame research questions of their own in light of behavioural theory and apply data science methodologies to address these questions.

Module aims

The aims of the module are as follows: 1) To help students understand the breadth of research in behavioural and data science; 2) To help students understand how to design and implement behavioral and data science research; 3) To help students to recognize cutting-edge research questions in behavioural and data science; 4) To give students the confidence and know-how to develop research projects of their own; 5) To give students experience in communicating research findings in written form and spoken presentations.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

The syllabus includes three parts:

1. Presentations from leaders in the field discussing published work that students will read and research in advance.
2. Presentations around the various aspects of practicing data science, from idea generation to implementation and written communication.
3. Students presentations focused on project development,

Learning outcomes

By the end of the module, students should be able to:

- Understand the practice of behavioural and data science as a domain, how practitioners frame questions and approach answering them.
- Design and implement behavioral data science research, from inspiration to submitted publication.
- Recognize cutting edge questions in behavioural data science.
- Communicate findings from data science to non-data science audiences in written or spoken form.

Research element

Students will do background investigations on high-profile research papers, unpack the methods, and present the work in a comprehensive way.

Interdisciplinary

The research covered will include all behavioural data science research, including work form economics, psychology, business, linguistics, computer science, etc.

International

Students attending the module are from a variety of countries.

Subject specific skills

1. Skills in researching behavioural data science
2. Skills in presenting behavioural data science

Transferable skills

1. Skills in research scholarship
2. Skills in research presentation
3. Skills in understanding and presenting research methodology
4. Skills in data analyses in the behavioural sciences

Study

Study time

Type	Required
Lectures	10 sessions of 2 hours (13%)
Seminars	5 sessions of 2 hours (7%)
Private study	60 hours (40%)
Assessment	60 hours (40%)
Total	150 hours

Private study description

Reading articles, researching methods, preparing written and visual presentation.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time
Research Presentation	50%	30 hours
Students present research.		
IBDS Project Report	50%	30 hours
A written theory-driven analysis of data written up as a short report for publication.		

Feedback on assessment

Students will receive written feedback.

Availability

Courses

This module is Core for:

- Year 1 of TPSS-C803 Postgraduate Taught Behavioural and Data Science