

Printed on 18 January 2023

| Short Title          | Long Title                     | Subject Area      | College               | School/Unit | Last Modified |
|----------------------|--------------------------------|-------------------|-----------------------|-------------|---------------|
| Biostatistics & Data | Biostatistics and Data Managem | Medicine Clinical | Health & Agricultural | Medicine    | 08 Sep 2022   |
| Management           |                                | Science           | Sciences              |             |               |

| UCD Level   | Credits (ECTS) | Semester/Trimester | Grade Scale   | VLE Setup   | Module Coordinator | Status |
|-------------|----------------|--------------------|---------------|-------------|--------------------|--------|
| 4 - Masters | 10.0           | Autumn             | Letter grades | Module in   | Marie Galligan     | Active |
|             |                |                    |               | Brightspace |                    |        |

| Mode of Delivery | Internship Module | Clinical / Fieldwork / Placement |
|------------------|-------------------|----------------------------------|
| Blended          | No                | Other                            |

| Overall Places | Core/Option | General Elective | First Year Elective | International | Open<br>Learning |
|----------------|-------------|------------------|---------------------|---------------|------------------|
| 80             | 80          | 0                | 0                   | 0             | 0                |

#### Purpose & Overarching Content

This module introduces students to key concepts in data management and biostatistics for clinical research, including study design. In addition to a strong theoretical framework, this module also provides practical experience in

Database development

Data analysis using SPSS

#### Learning Outcomes

On completion of this module, students should be able to

Understand the importance of data management and biostatistics in clinical research

Understand core considerations of data management, including data security, source data, etc.;

Understand core principles of experimental design - sampling, randomization, types of design etc

Understand common statistical methodologies applied to data generated from clinical trials

Be able to carry out basic statistical analysis of clinical trial datasets Create a data management plan for a clinical research project

#### Approaches to Teaching and Learning

Online lectures

In-class lectures Tutorials

Group work

Hands-on computer lab sessions

#### **Student Effort Hours**

| Student Effort Type                 | Hours |
|-------------------------------------|-------|
| Contact Time                        |       |
| Computer Aided Lab                  | 18    |
| Lectures                            | 54    |
| Total Contact Time                  | 72    |
| Specified Learning Activities       |       |
| Specified Learning Activities       | 48    |
| Total Specified Learning Activities | 48    |
| Autonomous Student Learning         |       |
| Autonomous Student Learning         | 80    |
| Total Autonomous Student Learning   | 80    |
| Total                               | 200   |



# Module Descriptor for MDCS41950 in 2022/2023

## Assessment Details

| Assesment Type        | Description | Timing                   | Open Book? | % of Final | Component | Must-Pass? | In-module        |
|-----------------------|-------------|--------------------------|------------|------------|-----------|------------|------------------|
|                       |             |                          |            | Grade      | Scale     |            | Component Repeat |
|                       |             |                          |            |            |           |            | Offered?         |
| Continuous Assessment | Continuous  | Throughout the Trimester |            | 60         | Graded    | No         | No               |
|                       | Assessment  |                          |            |            |           |            |                  |
| Examination           | EXAM        | 2 hour End of Trimester  | No         | 40         | Graded    | No         | No               |
|                       |             | Exam                     |            |            |           |            |                  |
| Total                 |             |                          |            | 100        |           |            |                  |

#### Carry Forward of Passed Components Yes

## Feedback Strategy

| Feedback Strategies                                    | Sequence of Feedback  |  |  |
|--|---|--|--|
| - Feedback individually to students, on an activity or | Students will receive feedback during in-class tutorials and post-assessment. |  |  |
| draft prior to summative assessment                    |   |  |  |
| - Feedback individually to students, post-assessment   |   |  |  |

#### **Remediation Strategy**

| Remediation Type | Remediation Timing    |  |  |
|------------------|-----------------------|--|--|
| Resit            | Within Two Trimesters |  |  |

## **Associated Staff**

| Name                     | Role                   |
|--------------------------|------------------------|
| Dr Marie Galligan        | Lecturer / Co-Lecturer |
| Dr Sinead Holden         | Lecturer / Co-Lecturer |
| Dr Deborah Wallace       | Lecturer / Co-Lecturer |
| Dr Ekele Alih            | VLE Access Only        |
| Ms Helen Campion         | VLE Access Only        |
| Miss Denise Gosling      | Module Assistant       |
| Mr Martin Heduan         | VLE Access Only        |
| Mrs Allison Kacperski    | VLE Access Only        |
| Professor Patrick Murray | VLE Access Only        |
| Mr Adam Tattersall       | VLE Access Only        |

### **Associated Majors**

| Programme                             | Major                                | Stage | Module Type   |
|---------------------------------------|--------------------------------------|-------|---------------|
| MTMED001 - Master of Science-Medicine | X874 - MSc Clinical&DiagnoBiochem FT | 1     | Core Module   |
| MTMED001 - Master of Science-Medicine | X889 - MSc DataAnalyPrecisionMed FT  | 1     | Option Module |
| MTLSC007 - Master of Science          | X878 - MSc Health Informatics FT     | 1     | Core Module   |
| MTMED001 - Master of Science-Medicine | X523 - MSc Healthcare Info (Sep) FT  | 1     | Option Module |
| MTMED001 - Master of Science-Medicine | X789 - MSc Clinic&Transl Research FT | 1     | Core Module   |
| GDMED001 - Graduate Diploma Medicine  | X293 - Grad Dip Healthcare Info FT   | 1     | Option Module |
| MTMED001 - Master of Science-Medicine | X427 - MSc Clinic&Transl Research PT | 1     | Option Module |
| GCMED001 - Graduate Certificate       | X912 - GC Healthcare Informatics FT  | 1     | Core Module   |
| Medicine                              |                                      |       |               |

For help with the information on this report, please email curriculum@ucd.ie