



# Module Descriptor for MDCS41950 in 2022/23

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

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

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

| Overall Places | Core/Option | General Elective | First Year Elective | International | Open 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<br>Database development<br>Data analysis using SPSS |

| Learning Outcomes  |
|--|
| On completion of this module, students should be able to<br>Understand the importance of data management and biostatistics in clinical research<br>Understand core considerations of data management, including data security, source data, etc.;<br>Understand core principles of experimental design - sampling, randomization, types of design etc<br>Understand common statistical methodologies applied to data generated from clinical trials<br>Be able to carry out basic statistical analysis of clinical trial datasets<br>Create a data management plan for a clinical research project |

| Approaches to Teaching and Learning   |
|---|
| Online lectures<br>In-class lectures<br>Tutorials<br>Group work<br>Hands-on computer lab sessions |

## Student Effort Hours

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



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## Assessment Details

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

### Carry Forward of Passed Components

Yes

## Feedback Strategy

| Feedback Strategies  | Sequence of Feedback  |
|--|---|
| <ul style="list-style-type: none"> <li>- Feedback individually to students, on an activity or draft prior to summative assessment</li> <li>- Feedback individually to students, post-assessment</li> </ul> | Students will receive feedback during in-class tutorials and 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   |
| GD MED001 - 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 |
| GC MED001 - Graduate Certificate Medicine | X912 - GC Healthcare Informatics FT  | 1     | Core Module   |

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