Module Template for New and Revised Modules

Module Code	ME7B09
Module Name	CURRENT TOPICS IN CELL AND TISSUE ENGINEERING
ECTS Weighting	10 ECTS
Semester taught	Semester 1 & 2
Module Coordinator/s	Daniel Kelly
Module Learning Outcomes with reference to the Graduate Attributes and how they are developed in discipline	On successful completion of this module, students should be able to: LO1. The ability to extract, through literature search, information pertinent to an unfamiliar problem. LO2. Develop a broad knowledge and understanding of emerging cell and tissue engineering strategies. LO3. Develop a broad knowledge and understanding of emerging biomaterials and biofabrication techniques relevant to the field of tissue engineering. LO4. Develop a broad knowledge and understanding of developing technologies that will impact on the fields of tissue engineering and regenerative medicine. LO5. The ability to critically assess the scientific literature. LO6. The ability to recognise the interactions between different technologies (including those outside the discipline of Biomedical Engineering) that will impact on the fields of cell and tissue engineering. LO7. The ability to write technical reports that synthesise the work of others. LO8. The ability to lead an oral discussion of emerging technologies related to their field of study. **Graduate Attributes: levels of attainment** To act responsibly - Enhanced To think independently - Enhanced To develop continuously - Enhanced To communicate effectively - Enhanced

Module Content	This weekly module will introduce students to cutting-edge research in cell and tissue engineering and many of the skills required to engage in such research. Each class will consist of a 1 hr discussion of a relevant cutting-edge cell and tissue engineering related research paper. This will take the form of an open discussion and critical assessment of the paper chaired by the module co-coordinator. All students will be required to spend approximately 5 hours reading and understanding the paper in advance of the meeting, as well as preparing a short report on each week's paper in advance of the class. Students will be asked to express their opinion or interpretation on various aspects of the paper being reviewed during the session.
Teaching and Learning Methods	Weekly assignments and in-class discussions.

Assessment Details
Please include the following:

- **Assessment Component**
- **Assessment description**
- **Learning Outcome(s) addressed**
- **% of total**
- **Assessment due date**

Assessment Component	Assessment Description	LO Addressed	% of total	Week due
Weekly Assignment	2 page report on assigned research paper	All	100	Weekly in S1 & S2

Reassessment Requirements

Detailed Assignment (Literature Review)

Contact Hours and Indicative Student Workload[3]

Contact hours: 1 hour per week. 22 hours in total.
Independent Study (preparation for course and review of materials): 5 hours per week. 110 hours in total.
Independent Study (preparation for assessment, incl. completion of assessment): 2 hours per week. 44 hours in total.

Recommended Reading List

Provided weekly by module coordinator

Module Pre-requisite

N/A

Module Co-requisite

N/A

COVID contingency plan

If necessary, all lectures/classes will be conducted online using TEAMS or blackboard

Module Website

Are other Schools/Departments involved in the delivery of this module? If yes, please provide details.

Module Approval Date

09/09/2022

Approved by

Danny Kelly

Academic Start Year

2022