

Module Details	
Module Title	Innovation in Life Science Industry: From Concept to Market Place
Module Code	BIS7011-B
Academic Year	2023/4
Credits	20
School	School of Chemistry and Biosciences
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	14
Practical Classes or Workshops	8
Tutorials	8
Directed Study	170

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims
<p>This module is designed to develop knowledge and understanding of:</p> <ol style="list-style-type: none"> <li>1. The business of Innovation</li> <li>2. The innovation environment, including legislation and patents</li> <li>3. Business structure and processes in new product development</li> <li>4. Product design and evaluation of product efficacy</li> </ol>

Outline Syllabus
<p>The innovation process; the Life Science and related products industry; Intellectual property management; Product development strategies; Clinical testing and generating claims support; Financial and risk-benefit analyses; Strategic marketing including understanding the potential of a novel or competitive new product in the market place and approaches to commercial analysis; Life skills including high impact presentations and negotiation, team working. Examples will be focused in the skin sciences and regenerative medicine areas and generally in the pharmaceutical and cosmetic science industries.</p>

Learning Outcomes	
Outcome Number	Description
01	Demonstrate an understanding of the technical, legislative, market and commercial approaches to innovation in the Life Sciences and the commercial considerations when developing a novel life science product or a medical device 'from concept to market place'.
02	Analyse with critical awareness new commercial opportunities in life science industries.
03	Use on-line tools for evaluation of the competitor and patent information for marketing purposes.
04	Demonstrate an understanding of the business landscape, including legislative, claims, market and financial.
05	Build strategies for evaluation (including clinical trials) in order to successfully bring competitive new inventions to market.
06	Demonstrate effective communication, teamwork, problem-solving and critical-thinking skills.
07	Develop your abilities as an innovator and entrepreneur.

Learning, Teaching and Assessment Strategy
<p>Lectures will cover innovation concepts such as 'Open Innovation'; the knowledge economy and industry/academic collaboration; product development principles; legislative frameworks; clinical, ethical and safety considerations; opportunity assessment and business/financial planning. Workshops and Case study interrogation will be used to develop practical skills in finding and evaluating competitor and market information and towards becoming able to determine commercial potential of a new product innovation, particularly in the skin sciences and/or regenerative medicine areas.</p> <ol style="list-style-type: none"> <li>Summative short Q&amp;A in workshop in week 7, completed individually in class.</li> <li>Summative coursework to a task introduced in the workshop in week 7 then submitted individually in week 14. Essay based on project.</li> <li>Project. A major assignment will be undertaken within directed time in which students will research a product innovation opportunity within Life Science/regenerative therapy/cosmeceuticals/medical devices. Students will be asked to work in a group to develop a commercial and technical pitch of their own idea to investors with the aim of obtaining financial investment to develop it further on the way to market. Group-based working and creativity sessions will be underpinned with group tutorials. The final presentation will involve presentation and negotiation skills. It will be made to a group of people who will role play Investors. The Investors will be deciding whether the project and/or the team are worth risking their valuable investment capital to develop the project further. They will ask questions about the presentation and project to assist in their decisions (like in the Dragons Den television programme). The Investors will include the Module Leader (with 20+ years? experience in working in appropriate industry) and invited external experts from industry.</li> </ol>

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Examination - Closed Book	15 short answer questions covering lectures in weeks 1-5 (LO1,2) (1 Hr)	20%
Summative	Dissertation or Project Report	Written case study of project	50%
Summative	Presentation	Dragon's Den' style group pres of a new product/medical device to attract investment 30min (Supp individual15min)	30%

## Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>

*Please note:*

*This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.*

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