

<b>Module Details</b>	
<b>Module Title:</b>	Innovation in Life Science Industry: From Concept to Market Place
<b>Module Code:</b>	BIS7011-B
<b>Academic Year:</b>	2019-20
<b>Credit Rating:</b>	20
<b>School:</b>	School of Chemistry and Biosciences
<b>Subject Area:</b>	Biomedical Science
<b>FHEQ Level:</b>	FHEQ Level 7 (Masters)
<b>Pre-requisites:</b>	
<b>Co-requisites:</b>	

<b>Contact Hours</b>	
<b>Type</b>	<b>Hours</b>
Lectures	17
Tutorials	6
Laboratory	3
Directed Study	174

<b>Availability</b>	
<b>Occurrence</b>	<b>Location / Period</b>
BDA	University of Bradford / Semester 2 (Feb - May)

<b>Module Aims</b>
<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>

<b>Outline Syllabus</b>
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.

### Learning Outcomes

1	Deeply understand and actively implement technical, legislative, clinical and commercial approaches to evaluating a commercial opportunity and developing a novel life science product or a medical device from concept to market place.
2	Analyse with critical awareness new commercial opportunities in life science industries.
3	Use on-line tools for evaluation of the competitor and patent information for marketing purposes.
4	Understand the business landscape, including legislative, claims and market.
5	Build strategies for evaluation (including clinical trials) in order to successfully bring competitive new inventions to market.
6	Demonstrate effective communication, teamwork, problem-solving and critical-thinking skills.
7	Further develop your abilities as an innovator and entrepreneur.

### Learning, Teaching and Assessment Strategy

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.

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 for skin benefit. 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 support 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.

### Mode of Assessment

Type	Method	Description	Length	Weighting
Summative	Presentation	'Dragon's Den' style group presentation of a new product or medical device to attract the investment	0 hours	40%
Summative	Presentation	Group presentation of the research on the commercial opportunities of a new product or medical device	0 hours	20%
Summative	Examination - MCQ	Extended MCQ examination including 60 questions	1.5 hours	40%

### 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.*