Module Code | CS7CS6
---|---
Module Name | Research and Innovation Methods
ECTS Weighting¹ | 5 ECTS
Semester taught | Semester 1
Module Coordinator/s | Gaye Stephens, Dave Lewis

Module Learning Outcomes

On successful completion of this module, students will be able to:

- LO1 Locate, obtain and critique relevant knowledge and evidence to support innovation and research;
- LO2 Ideate innovation and research questions
- LO3 Analyse levels of technology innovation and create emerging business models
- LO4 Shape research questions and rigorous methods for answering them.
- LO5 Describe ethical concerns and approaches for research and technology innovations
- LO6 Present research and innovation for a critical audience.

Module Content

Specific topics addressed in this module include:

- Types of businesses and differing business and/or social drivers (case studies)
- The Lean Startup model
- Applying Business Model canvas for strategic assessment of business ideas
- Customer development and validation
- The business plan: objectives; contents; analysis of sample plans
- Market analysis: why and how
- Intellectual Property: how to protect your idea
- Legal, ethical and social impacts of innovation activities
- The school's research ethics application process
- Library and reference management skills
- Expressing rigorous research proposal
- understand the process of creating a dissertation.

Teaching and Learning Methods

Lectures, Feedback Clinics, Student Presentations

Assessment Details²

<table>
<thead>
<tr>
<th>Assessment Component</th>
<th>Brief Description</th>
<th>Learning Outcomes Addressed</th>
<th>% of total</th>
<th>Week set</th>
<th>Week due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Assessment</td>
<td>1. Substantial group project spanning the module</td>
<td>LO1, LO2, LO3, LO4</td>
<td>100%</td>
<td>Starting in week 2</td>
<td>Various Deadlines</td>
</tr>
<tr>
<td></td>
<td>2. Individual Project to create a research Plan Canvas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ TEP Glossary
² TEP Guidelines on Workload and Assessment
3. individual reports of team effectiveness and reflection of personal lessons learnt

<table>
<thead>
<tr>
<th>Contact Hours and Indicative Student Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contact Hours (scheduled hours per student over full module), broken down by:</strong></td>
</tr>
<tr>
<td>lecture</td>
</tr>
<tr>
<td>Feedback Clinics and Presentations</td>
</tr>
<tr>
<td><strong>Independent study (outside scheduled contact hours), broken down by:</strong></td>
</tr>
<tr>
<td>preparation for classes and review of material (including preparation for examination, if applicable)</td>
</tr>
<tr>
<td>completion of assessments (including examination, if applicable)</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
</tr>
</tbody>
</table>

**Recommended Reading List**
- Business Model Generation, Alex Osterwalder and Yves Pigneur, 2010
- The Lean Startup, Eric Ries, 2011
- Research Design, John W. Cresswell, 2014
- Research Methods, Information, Systems, and Contexts, Kirsty Williamson, Graeme Johanson, 2018
- The Elements of Style, William Strunk Jr., 2000

**Module Website**
https://www.scss.tcd.ie/CourseModules/CS7CS6/

**Last Update**
02/09/2019 by Gaye Stephens