1. **Title of the module**

LABS407 Business Improvement

1. **School or partner institution which will be responsible for management of the module**

Digital and Lifelong Learning

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 4

1. **The number of credits and the ECTS value which the module represents**

15 Credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Flexible delivery model

Autumn and/or Spring and/or Summer

1. **Prerequisite and co-requisite modules**

N/A

1. **The course(s) of study to which the module contributes**

FdSc and BSc (Hons) in Applied Bioscience

FdSc and BSc (Hons) in Applied Chemical Sciences

1. **The intended subject specific learning outcomes.
On successfully completing the module students will be able to:**

8.1 Demonstrate a working knowledge of project management and an ability to relate this to the current work environment.

8.2 Demonstrate a clear understanding of the various continuous improvement cycles, methodologies and tools that are commonly employed in a process plant, laboratory or office business context.

8.3 Apply a project management **or** continuous improvement process to a real work-based situation confidently.

8.4 Show the ability to critically self-appraise the application and impact of the project management **or** continuous improvement process project and to identify its' strengths and weaknesses.

8.5 Clearly communicate the findings through a report and presentation to a varied target audience.

1. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**

9.1 Demonstrate the development of practical/technical skills.

9.2 Analyse, evaluate and correctly interpret data.

9.3 Communicate and present data effectively.

9.4 Obtain and use information from a variety of sources as part of self-directed learning.

9.5 Manage their time and use their organisation skills within the context of self-directed learning.

1. **A synopsis of the curriculum**

An overview of the continuous improvement process illustrating how it is being applied throughout the bioscience industries.

Building and leading effective teams

Project management in the workplace

Business improvement process cycles – PDCA (Plan, Do, Check, Act) and the progression to DMAIC (Define, Measure, Analyse, Improve, Control). DMAIC will then be used as the cycle to deploy the methodologies and tools.

Methodologies: - Lean (reduction of “waste” in all its forms and productivity improvement); - Six Sigma (reduction in process variation and elimination of errors)

Continuous Improvement Reporting – the Toyota A3 Report

**Reading list (Indicative list, current at the time of publication. Reading lists will be published annually)**

Pinto, Jeffrey K. Project Management: Achieving Competitive Advantage. Pearson, 2020.

Fielding, P. J. and Corporation, E. How to Manage Projects : Essential Project Management Skills to Deliver On-time, On-budget Results’. London: Kogan Page, 2019.

Kerzner, H. R. Project management a systems approach to planning, scheduling, and controlling. Somerset: Wiley, 2013.

Layton, M., Kynaston , D. J. and Ostermiller author, S. J. Agile project management. Hoboken, John Wiley & Sons, 2020.

Project Management Institute, A guide to the project management body of knowledge (PMBOK guide). Newtown Square, Pennsylvania: Project Management Institute, 2017.Kerzner, H. Project management metrics, KPIs, and dashboards : a guide to measuring and monitoring project performance’. Hoboken, Wiley, 2017.

Young, T. L. Successful Project Management. London: Kogan Page, 2016.

Morgan, J. and Brenig-Jones, M. Lean six sigma for dummie. Chichester, John Wiley & Sons, 2016.

Munro, R. A. Lean six sigma for the healthcare practice a pocket guide. Milwaukee: ASQ Quality Press, 2009.

1. **Learning and teaching methods**

Blended distance learning:

 Contact hours: 122 hours

 Private Study Time: 28 hours

 Total Learning Time: 150 hours

1. **Assessment methods**
	1. Main assessment methods

Hypothetical Project 50% - composed of individual assignments (2500 words in total)

Online (Moodle) Quiz 20%

Oral Presentation 30% (20 minutes)

The pass mark for each individual assessment is 40%.  All assessments must be passed to pass the module.

13.2 Reassessment methods

Like for Like

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| **Teaching** | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** |  |  |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Work-based experience |  |  |  |  |  | **x** | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| Hypothetical Project | **x** |  |  | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Moodle Quiz |  | **x** | **x** |  |  | **x** | **x** |  |  |  |
| Oral Presentation | **x** |  |  | **x** | **x** |  |  | **x** |  |  |

1. **Inclusive module design**

The division recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching, and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Blended distance learning – Canterbury or Medway campus

1. **Internationalisation**

Business Improvement is a core component of the Pharmaceutic R & D industry and this module reflects international aspects. With regards to the intended learning outcomes, in particular 8.2, the target learning outcomes within this module are applicable worldwide as part of the universal principles of business in science.

**DIVISIONAL USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
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