

**Session: 2022/23**

Last modified: 22/07/2022 11:44:00

<b>Title of Module: Operations &amp; Project Mgt</b>			
<b>Code: QUAL11001</b>	<b>SCQF Level: 11</b> (Scottish Credit and Qualifications Framework)	<b>Credit Points: 20</b>	<b>ECTS: 10</b> (European Credit Transfer Scheme)
<b>School:</b>	School of Computing, Engineering and Physical Sciences		
<b>Module Co-ordinator:</b>	Farhad Anvari		
<b>Summary of Module</b>			
<p>Designed for both face-to-face and online delivery, this module begins with an introduction to and overview of Operations Management, starting with some core definitions, models and frameworks. Topics covered in lectures will include strategic objectives of operations management, operations strategy, operations development and improvement, evolution of operations management. There will then be a series of lectures on design in operations management. These will refer to the design of products and services, process design and the operations network, and design of facilities.</p> <p>The module will develop a range of graduate attributes. Students will learn about some of the key techniques used in Operations Management. These are techniques that are used for forecasting, planning and control and project management. Techniques covered will range from simple exponential smoothing for forecasting, through MRP and Just-In-Time, to Critical Path Analysis. Students will then develop their skills in applying these techniques through two pieces of coursework.</p> <p>The module requires some directed and undirected research to be undertaken in order to gain a working understanding of the subject.</p> <ul style="list-style-type: none"> <li>This module has been reviewed and updated, taking cognisance of the University's Curriculum Framework principles. Examples of this are found within the module such as active and engaging tutorial activity with contemporary industry examples of modular content, module assessment which reflects industry activities, learning synergies across modules and levels of study and recorded lecture content supporting students to organise their own study time.</li> </ul>			

<b>Module Delivery Method</b>					
<b>Face-To-Face</b>	<b>Blended</b>	<b>Fully Online</b>	<b>HybridC</b>	<b>HybridO</b>	<b>Work-based Learning</b>
		✓	✓		
<p><b>Face-To-Face</b> Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.</p> <p><b>Blended</b> A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations</p> <p><b>Fully Online</b> Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.</p> <p><b>HybridC</b> Online with mandatory face-to-face learning on Campus</p> <p><b>HybridO</b> Online with optional face-to-face learning on Campus</p> <p><b>Work-based Learning</b> Learning activities where the main location for the learning experience is in the workplace.</p>					

<b>Campus(es) for Module Delivery</b>						
The module will <b>normally</b> be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
✓					✓	✓
<b>Term(s) for Module Delivery</b>						
(Provided viable student numbers permit).						
Term 1	✓	Term 2	✓	Term 3	✓	

<b>Learning Outcomes: (maximum of 5 statements)</b>	
On successful completion of this module the student will be able to: L1. Demonstrate a critical understanding of the functional role of operations in an organisation and its strategic importance L2. Demonstrate extensive knowledge and critical understanding of issues associated with the design, management and improvement of the operating system L3. Demonstrate advanced knowledge of manufacturing planning and control systems and associated analytical techniques L4. Demonstrate advanced knowledge and skills on the management of projects.	
<b>Employability Skills and Personal Development Planning (PDP) Skills</b>	
<b>SCQF Headings</b>	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF Level 11. Demonstrating a broad and integrated knowledge of the main aspects of Operations Management.  Achieve a detailed knowledge of and be able to develop an appropriate operations strategy
Practice: Applied Knowledge and Understanding	SCQF Level 11. Using skills and techniques to support a range of Operations Management decisions  Demonstrating a critical understanding of the impact of different design decisions
Generic Cognitive skills	SCQF Level 11. Being able to appreciate how different decisions lead to a coherent Operations Management strategy  Demonstrating some originality and creativity when applying different modelling techniques.
Communication, ICT and Numeracy Skills	SCQF Level 11. Being able to use appropriate software such as Excel to build forecasting models. Being able to plan a small project and identify the

	critical path  Offering professional level insights from the results of a technical modelling project to a business audience	
Autonomy, Accountability and Working with others	SCQF Level 11. Being able to work in a small team to address a complex Operations Management exercise  Being able to research a topic and work independently	
<b>Pre-requisites:</b>	Before undertaking this module the student should have undertaken the following:	
	<b>Module Code:</b>	<b>Module Title:</b>
	<b>Other:</b>	
<b>Co-requisites</b>	<b>Module Code:</b>	<b>Module Title:</b>

\* Indicates that module descriptor is not published.

<b>Learning and Teaching</b>	
<p>The Learning &amp; Teaching Strategy for this module is based on the university's strategy for teaching and learning.</p> <p>Classes are delivered on a weekly basis. Lectures will introduce and exemplify key theoretical and critical concepts. Tutorial sessions will be given to further develop students' understanding. Computer laboratory sessions will be used to develop forecasting skills. Students will be given sufficient time and support to work on assignments.</p> <p>For students studying in online mode, full use will be made of the VLE. That is, all teaching material will be made available on-line and students will be guided through the material. Email and video-conferencing will be used extensively to support students. Group work will be organised and supported through facilities on the VLE such as forums and wikis.</p> <p>Face-to-face students will use Microsoft Excel software for forecasting purposes. Online students may choose to use an equivalent package if they wish.</p>	
<b>Learning Activities</b>	<b>Student Learning Hours</b> (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	
Lecture/Core Content Delivery	18
Tutorial/Synchronous Support Activity	18
Independent Study	164
	200 Hours Total
<b>**Indicative Resources: (eg. Core text, journals, internet access)</b>	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>Slack, N, Brandon-Jones, A and Johnson, R (2016), 'Operations Management', 8th Edition, Pearson.</p>	

'Operations Management', Nigel Slack, Stuart Chambers, Robert Johnston, Fifth Edition 2006, Financial times/Prentice Hall

Slack, N and Lewis, M (2017) 'Operations Strategy', Fifth Edition, Financial Times/Prentice Hall

Hill, A and Terry Hill, T (2017), 'Essential Operations Management', 2nd Edition, Red Grove Press

Waller, D (2003) 'Operations Management - a Supply Chain Approach', Second edition, Thomson

'Service Operations Management', R.G. Murdick, B. Render, R.S. Russell International Student Edition, Allyn and Bacon

Software - Microsoft Excel

James M Wilson ' An Historical Perspective On Operations Management' , Production and Inventory Management Journal, Third quarter, pp. 61-66, 1995.

Chris Voss 'Operations Management – From Taylor to Toyota and Beyond' British Journal of Management, Volume 6 special Issue, pp. 17-29, 1995

Roger L. Schmenner and Morgan L. Swink (1998) 'On Theory of Operations Management' Journal Of Operations Management, 17, pp. 97-113

E.E. Adam and P.M. Swamidass (1989) ' Assessing Operations Management From A Strategic Perspective', Journal Of Management 15(2), pp. 181-203

G.P Panniselvam, L.A Ferguson, R.C. Ash and S.P. Siferd (1999) 'Operations Management Research: an Update for the 1990's, Journal of Operations Management, Volume 18, pp 95-112

Robert H. Hayes (2000) 'Toward a New Architecture for POM', Production and Operations Management, Vol 9, No 2, Summer, pp. 105-110

T.C. Powell (1995) "Total quality Management as Competitive Advantage: A review and empirical study" Strategic Management Journal, 16, pp. 15-37

Kasra Ferdows and Amoud De Meyer (1990) ' Lasting Improvements in Manufacturing Performance', Journal of Operations Management, 9(2), pp168-184

Dorothy Leonard – Barton (1992) 'The factory as Learning Laboratory', Sloan Management Review, Fall, pp. 23-38

(\*\*N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk\*) to wait until the start of session for confirmation of the most up-to-date material)

### **Engagement Requirements**

In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: [Academic engagement procedure](#)

## Supplemental Information

<b>Programme Board</b>	Engineering
<b>Assessment Results (Pass/Fail)</b>	No
<b>Subject Panel</b>	Civil Engineering and Quality Management
<b>Moderator</b>	Dr Thanos Kourouklis
<b>External Examiner</b>	B Savage
<b>Accreditation Details</b>	
<b>Version Number</b>	2.14

### Assessment: (also refer to Assessment Outcomes Grids below)

A written assignment worth 40% of the final mark comprising of an operational strategy analysis and a forecasting coursework. The coursework will generally contain a mixture of text (between 400 and 2500 words), calculation and technical analysis. It will be done in small groups or pairs.

An examination worth 60% of the final mark. DL students are required to attend the examination on Paisley Campus or make arrangements to sit the examination at a UWS approved centre.

(N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.  
(ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Handbook.)

### Assessment Outcome Grids (Footnote A.)

<b>Component 1</b>							
<b>Assessment Type (Footnote B.)</b>	<b>Learning Outcome (1)</b>	<b>Learning Outcome (2)</b>	<b>Learning Outcome (3)</b>	<b>Learning Outcome (4)</b>	<b>Weighting (%) of Assessment Element</b>	<b>Timetabled Contact Hours</b>	
Portfolio of written work	✓	✓	✓	✓	40	0	
<b>Component 2</b>							
<b>Assessment Type (Footnote B.)</b>	<b>Learning Outcome (1)</b>	<b>Learning Outcome (2)</b>	<b>Learning Outcome (3)</b>	<b>Learning Outcome (4)</b>	<b>Weighting (%) of Assessment Element</b>	<b>Timetabled Contact Hours</b>	
Unseen closed book (standard)	✓	✓	✓	✓	60	0	
<b>Combined Total For All Components</b>					100%	0 hours	

## Footnotes

A. Referred to within Assessment Section above

B. Identified in the Learning Outcome Section above

Note(s):

1. More than one assessment method can be used to assess individual learning outcomes.
2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).  
This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

### **Equality and Diversity**

This module is appropriate for all students.  
[UWS Equality and Diversity Policy](#)

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)