

FUC - Ficha de Unidade Curricular

Curricular Unit's File

Code	L1526
Name (PT)	Gestão de Operações II
Name (EN)	Operations Management II
Regime	Semestral
Level	1.º Ciclo
Teaching language	Português , Inglês
School	Escola de Gestão (EG)
Departament	DMOG
Scientific area	Tecnologia, Produção e Operações (TPO)
Responsible academic staff	João Manuel Vilas Boas da Silva
Pre-requisites	Understanding of English as a working language: comprehension, speaking and writing up.
Objectives	<p>Promoting a modern approach to Operations Management (OM) based on the introduction and discussion of the two main OM paradigms, in order to achieve success within a complex business world.</p> <p>Promoting the syllabus integration with Operations Management I.</p>
Learning outcomes	<p>Students should be able to...</p> <ol style="list-style-type: none"> 1. Understand the state of the art of organisational modelling and, to describe and compare its impact on the operations task. 2. Explain the alignment of decision making in the choice of competitive production systems. 3. Position & operationalise Operations Management choices within the scope of the main organisational paradigms to support business survival along time.

<p>Syllabus</p>	<p>I - Introduction Progress, inventory, RPs, modeling, JIT/WCM</p> <p>II - OM paradigm refinement Objectives, inventory, SFC ?Repetitive & Intermittent production</p> <p>III - OM control paradigm ?EQ, continuous and periodic reviewing</p> <p>Qualitative & quantitative forecasting</p> <p>Aggregate planning</p> <p>MRP Inputs: MPS, Inventory record file, BOM</p> <p>Computation: regeneration, requirements, explosion, planning factors</p> <p>MRP outputs</p> <p>MRP II</p> <p>IV - Lean manufacturing paradigm Introduction ?Definitions, aims, waste & 7-zeros</p> <p>Design ?focus, demand management, technology, total quality, people and teams</p> <p>Operation ?visibility, continuous improvement, master scheduling, inventory, performance</p> <p>Lean dimension ?supply, distribution, design, customer service</p>
<p>Assessment</p>	<p>OPTION 1 ? Continuous Assessment ?Involvement, attendance (>80%) & punctuality (10%)</p> <p>2. 2/3 Group Assignments (6 people) (40%) Presentations & written reports.</p> <p>3. Individual written test (50%)</p> <p>Pass: the weighted average of the 3 components is 10 out of 20 or above, with a minimum grade of 8 in the components 2 & 3.</p> <p>OPTION 2 ? End-of-term individual written exam Applies to the students who failed or chose this way.</p> <p>A pass means a grade of 10 out of 20 or above.</p>
<p>Teaching methodology</p>	<p>The following methodologies will be used:</p> <ol style="list-style-type: none"> 1. Traditional / lectures for presenting theoretical frameworks. 2. Participative methodologies in the analysis and solution of exercises. 3. Participative methodologies in the analysis and discussion of case studies, and other supporting texts. 4. Active methodologies in the execution of individual assignments. 5. Active and cooperative methodologies in the execution of group assignments. 6. Self-study.

<p>Demonstration of the syllabus coherence with the curricular unit's objectives</p>	<p>This 'demonstration of consistency' stems from the interconnection of the syllabus (S) with the learning goals (LG) and is explained as follows:</p> <p>LG1 ? S1 LG2 ? S1, S2 LG3 ? S3, S4</p> <p>The core chapters of the program (S3 & S4) concern the two main materials control paradigms, i.e. RP and lean manufacturing. In order to understand the adequateness of these frameworks, the program also details the technological solutions regarding both repetitive and intermittent production (S2). To sum up, this course promotes the successful understanding of a modern approach to Operations Management by positioning the most important control paradigms within the current business scope, as detailed in OM I.</p>
<p>Demonstration of the coherence between the teaching methodologies and the learning outcomes</p>	<p>The learning-teaching methodologies are aimed at the development of the students' main learning competences that allow to fulfill each of the learning goals, therefore, in the grid below, it is presented the main interlinks between the learning-teaching methodologies and the respective goals.</p> <p>Learning-Teaching Methodologies(LTM): Learning Goal (LG)</p> <ol style="list-style-type: none"> 1. Expository, to the presentation of the theoretical reference frames (LTM):LG1, LG2, LG3 2. Participative, with analysis and resolution of application exercises(LTM):LG3 3. Participative, with analysis and discussion of case studies and supporting texts(LTM):LG2 4. Active and collaborative, with the realization of group works(LTM): LG3 5. Self-study, related with autonomous work by the student (LTM): LG1, LG2, LG3 <p>Despite the lecturer prescribes the theoretical principles and ideas regarding the topics of the program, some coaching will be provided to support both the group assignments and the individual study. In addition, numerical exercises will be solved from an 'exercise booklet', which will be put together specially for this course. Practical activities, like the 'vacuum cleaner' exercise and watching videos will be used to illustrate a few concepts. concerning repetitive and intermittent manufacturing.</p> <p>The students will be motivated to act both in a proactive and collaborative way, but also autonomously. Presentations will be given and academic reports will be written up both concerning group research and case study about the RP paradigm. On the other hand, while numerical exercises will also provide some support to the learning of the RP paradigm, a case study about lean production might show up as more adequate to help the knowledge concerning this paradigm to progress.</p>
<p>Main Bibliography</p>	<p>Os alunos abrangidos pelo «Regulamento Interno para Estudantes com Estatutos Especiais» deverão contactar o docente da UC, ou o Coordenador da mesma, na primeira semana de aulas de cada semestre, com vista ao enquadramento dos processos de aprendizagem e avaliação na UC.</p>
<p>Complementary Bibliography</p>	<p>Students that fulfill the requirements to appeal for a special status within the scope of the «Regulamento Interno para Estudantes com Estatutos Especiais» must get in touch with the Lecturer/UC responsible, during the first week of the semester, to eventually adjust both the learning and the assessment processes.</p>