

Processo Bolonha

Ficha de unidade curricular (FUC)

Gestão de Operações II
Departamento: Ciências de Gestão
Área: Tecnologia, Produção e Operações
Activa nos Planos Curriculares: Licenciatura em Gestão e Engenharia Industrial
Estado: Aprovado
Código: 1526
Nome (pt): Gestão de Operações II
Name (en): Operations Management II
Acrónimo: GOp II
Nível: 1. Ciclo
Tipo: Lectivo
Língua(s) de Ensino: Inglês
Regime: Semestral
Carga Horária:
Aula Teórica (T): 60.0 h/semestre
Aula de Laboratório (PL): 0.0 h/semestre
Seminário (S): 0.0 h/semestre
Trabalho de Campo (TC): 20.0 h/semestre
Estágio (E) : 0.0 h/semestre
Orientação Tutorial (OT): 1,0 h/semestre
Outras (O): 4.0 h/semestre
Horas de Contacto (Total): 61,0 h/semestre
Trabalho Autónomo: 89,0 h/semestre
Horas de Trabalho Total (Horas de Contacto + Trabalho Autónomo): 150,0 h/semestre
Créditos ECTS: 6.0

Pt	En
Pré-requisitos:	Pre-requisites:
Nenhum.	None.
Objetivos (1000 caracteres):	Objectives:
	<p><u>The ultimate goal</u></p> <p>Promoting a modern approach to operations management 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 (UC 1523)</p> <p><u>General objectives</u></p> <p>Introducing the state of the art, as regards organisational modelling and, describing its impact on the operations task.</p> <p>Promoting the alignment of decision making in the choice of competitive production systems</p> <p>Positioning operations management within the scope of the main organisational paradigms to promote survival</p> <p><u>Detailed objectives</u></p> <p>I - Introduction</p> <ul style="list-style-type: none"> • identifying main OM paradigms • deploying them against a timescale • introducing ROL, MRP and JIT <p>II - OM paradigm refinement</p> <ul style="list-style-type: none"> • characterising and understanding the differences between repetitive and intermittent manufacturing • introducing the <i>Enterprise Systems</i> <p>III - OM control paradigm</p> <ul style="list-style-type: none"> • operationalising independent demand inventory management • providing a critical review of the classical systems • understanding the role & limitations of forecasting • introducing a few forecasting methods • building up the planning architecture • learn to build up and to select options • using costs as an evaluation mechanism • introducing the main concepts of MRP • materials requirements planning • preparing the MRP inputs • computation of the net requirements • capacity requirements planning • issuing and releasing of both shop and purchase orders • illustrating with numerical applications <p>IV - Lean manufacturing paradigm</p> <ul style="list-style-type: none"> • introducing the lean manufacturing paradigm • introducing basic concepts • designing a JIT system • operating a JIT system • illustrating with numerical applications

Programa (1500 caracteres):

Program:

I - Introduction

Progress of OM along time
Reorder level methods (ROL)
The "Requirements Planning" approach
The "World Class Manufacturing" approach

II - OM paradigm refinement

Repetitive production
▪ objectives, inventory control and shop floor control

Intermittent production
▪ objectives, inventory control and SFC

The control paradigm

III - OM control paradigm

Independent Materials Management
▪ fundamentals
▪ cost modelling and economic order quantity
▪ continuous and periodic review systems

Forecasting
▪ qualitative methods
▪ causal forecasting
▪ method selection

Aggregate planning
▪ costs
▪ minimum cost analysis
▪ evaluation

Inputs to an MRP System
▪ Master production schedule
▪ Inventory record file
▪ Bill of material file

Requirements Computation
▪ schedule regeneration vs. net change
▪ gross vs. net requirements
▪ explosion of requirements
▪ planning factors

MRP outputs

MRP II
▪ Shop scheduling systems

IV - Lean manufacturing paradigm

JIT introduction
▪ Definitions, aims, waste & 7-zeros

JIT design
▪ focus
▪ demand management
▪ technology
▪ total quality
▪ people and team preparation

JIT operation
▪ visibility and data collection
▪ improvement
▪ master scheduling
▪ inventory management
▪ measurement

Lean dimension
▪ lean supply
▪ lean distribution
▪ lean design
▪ lean customer service

<p>Processo de Avaliação (1000 caracteres):</p> <p>MODALIDADE 1:</p> <p>Avaliação ao longo do período lectivo:</p> <ol style="list-style-type: none"> Participação nas aulas: <ul style="list-style-type: none"> Assiduidade e pontualidade. Intervenção e participação nas aulas. Discussão de exemplos e casos. <p><i>Peso na classificação final: 10%</i></p> Trabalho de Grupo (6 alunos) <ul style="list-style-type: none"> Datas de acordo com o plano detalhado Breve relatório (cerca de 20 páginas) Um dos trabalhos será apresentado <p><i>Peso na classificação final: 40%</i></p> <p>Avaliação no final do período lectivo:</p> <ol style="list-style-type: none"> Teste final: <ul style="list-style-type: none"> Prova escrita individual <p><i>Peso na classificação final: 50%</i></p> <p>A aprovação é obtida com a média ponderada das três componentes superior a 10 valores e 8 valores ou superior em qualquer das três componentes de avaliação.</p> <p>MODALIDADE 2:</p> <p>Para:</p> <ul style="list-style-type: none"> Os alunos que não tiveram aprovação na modalidade anterior. Os alunos que tiverem aprovação na modalidade anterior, mas optaram por ser avaliados só por exame final. <p>Exame consistindo em:</p> <ul style="list-style-type: none"> Prova escrita individual <p>A aprovação é obtida com uma classificação de 10 valores ou superior.</p>	<p>Evaluation Methodology:</p> <p>OPTION 1</p> <p>Assessment along the term:</p> <ol style="list-style-type: none"> Involvement in class activities. <ul style="list-style-type: none"> Levels of attendance and punctuality. Participation in lectures. Discussion of examples and cases. <p><i>Weight: 10%</i></p> Group Assignment (6 students) <ul style="list-style-type: none"> Delivery due dates after the detailed planning Short report (about 20 pages) One of the reports should be presented <p><i>Weight: 40%</i></p> <p>Assessment at the end of the term:</p> <ol style="list-style-type: none"> End-of-term test <p><i>Weight: 50%</i></p> <p>The final grade is the weighted average of the grades of the three components in a scale of 0 up to 20. A <i>pass</i> mark means a grade of 10 or above, with a grade of 8 or above in each one of the three components.</p> <p>OPTION 2</p> <p>Applies to the students who:</p> <ul style="list-style-type: none"> Did not get a positive grade by Option 1. Got a positive grade by Option 1 but decided to be assessed by final exam only. <p>End-of-term examination with questions.</p> <p>A positive evaluation means a grade of 10 or above (in a scale of 0 up to 20).</p>
<p>Processo de Ensino-Aprendizagem (1000 caracteres):</p> <p>No decurso da UC recorrer-se-á a:</p> <ul style="list-style-type: none"> Metodologias expositivas para apresentação dos quadros teóricos de referência. 	<p>Teaching Methodology:</p> <p>During the term the following methodologies will be used:</p> <ul style="list-style-type: none"> Traditional / lectures for presenting theoretical frameworks.

<ul style="list-style-type: none"> • Metodologias participativas com análise e resolução de exercícios de aplicação. • Metodologias participativas com análise e discussão de casos de estudo, e textos de apoio e leitura. • Metodologias activas com realização de trabalhos individuais. • Metodologias activas e colaborativas com realização de trabalhos de grupo. • Auto-estudo. 	<ul style="list-style-type: none"> • Participative methodologies in the analysis and solution of exercises. • Participative methodologies in the analysis and discussion of case studies, and other supporting texts. • Active methodologies in the execution of individual assignments. • Active and cooperative methodologies in the execution of group assignments. • Self-study.
Observações:	Observations:
Bibliografia:	
Básica (máx. 15 títulos)	
<ul style="list-style-type: none"> • Presentations prepared by the lecturer for both unique and exclusive use in this course • Chase, R., Jacobs, F. and Aquilano, J. (2006). <i>Operations Management for Competitive Advantage</i>. 11th Edition, McGraw-Hill. • Schroeder, R. (1993). <i>Operations Management – Decision Making in the Operations Function</i>. 4th Edition, McGraw-Hill. • Slack, N., Chambers, S., Harland, C., Harrison, A. and Johnston, R. (1995). <i>Operations management</i>. Pitman Publishing, Great Britain. 	
Complementar (máx. 50 títulos)	
<ul style="list-style-type: none"> • Roldão, Victor Sequeira; Ribeiro, Joaquim Silva, <i>Gestão das Operações – uma abordagem integrada</i>, Monitor, Lisboa, 2007 	