Curricular Unit Form

POLITÉCNICO DE PORTALEGRE

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Escola Superior Agrária de Elvas

Updated On	2024/02/07
Curricular Year / Period	2023/24 / S1
Course	Agronomy
Curricular Unit	Product Processing Technology
Language(s) of Instruction	Português Inglês

ECTS/tempo de trabalho (horas)

ECTS	Total	Horas de contacto semestral								
		T	TP	PL	S	TC	E	O	OT	EC
5	134	0	32	16	0	0	0	0	32	0

T - Theoretical; TP - Theoretical and practical; LP - Laboratory Practice; S - Seminar; TG - Tutorial guidance; FW - Fieldwork; T - Training; ; EC - Clinical teaching; O* - Other hours typified as Clinical Training under the Directive 77/453/EEC of June 27, adapted by Directive 2005/36/EC.

Teacher in charge (GDPR consent)

[complete name, email]

Maria Da Graça Teles De Sousa Pacheco De Carvalho / gpcarvalho@ipportalegre.pt

Prerequisites

[Curricular Units that must precede and specific entry competences]

not applied

Learning outcomes

[Description of the overall and specific objectives] [Knowledge, skills and competences to be developed by students]

1. To develop in students skills that allow them to know and understand the different technological processes that lead to the manufacture of the main processed products of the region;
2. Know and know the sequences of the different unit operations that give rise to the different processes.
3. Know the new processes that are in expansion and application in the development of new products.
4. To know the conditions and needs of implantation and operation of a manufacturing plant.

At the end of the course unit the student should also:

1. Know the main transformation technologies and the importance of each of them in obtaining products in the production and processing of food products.
2. Develop a critical and attentive spirit on this area of knowledge.
3. Know the new processes applied to the transformation of products
4. Know how to identify the different unit operations that are involved in the technological processes;

SDG: 2,8,9 e 12

Sustainable Developemnt Goals

Syllabus

1. Main unit operations. Processes and food technologies.
2. Wine technology: The raw material; Microbiology and fermentation; Biochemistry of alcoholic and malolactic fermentations; Mechanical operations; Vinification in white; Vinification in red and special, Conservation, aging and stabilization; Clarity and clarity; Diseases and defects 3.Technology of olive oil: Maturation and collection of olives; Transport; Defoliation and washing; Milling and grinding; Extraction; Conservation of olive oil; Analysis and classification 4. Meat technology: slaughter of animals; Transformation of muscle into flesh; Manufacture of traditional sausages; Manufacture of ham; Manufacture of ham; Manufacture of frankfurt sausages; Mechanisms of conservation.
5. Milk technology: Composition. Properties and use of their constituents; Milking and transport; Conservation, treatment and storage; Manufacture of cheese; Manufacture of yogurt; Manufacture of butter.
6. New Transformation Technologies: Microwave; HPP, ultrasound; Ionizing radiation; Specific atmospheres (controlled, modified); Products of 4th range; New products.

Teaching methodologies (including assessment)

[Specify the types of assessment and the weights and evaluation criteria]

1 - Teaching methodologies

The UC is organized in theoretical-practical classes, laboratory practices and tutorial orientation. Two theoretical evaluation tests are carried out. The value obtained weighs 70% of the final value, the remaining 30% is attributed to the evaluation of the practical component (work and presentation) always higher than 9.5. (mean> = 9.5, no <8.5) than (70%) + Work and presentation (> = 9.5) (30%). (Test 1 + Test 2) / 2 (70%) + Practical evaluation (30%). If the student did not meet the above conditions, that is, 2 theoretical tests (mean <9.5 and / or some <8.5) (70%) and / or Work and presentation (<9,5) (30%), it should make the assessment by exam to the component of the UC, theoretical or practical, according to the grade obtained: theoretical (70% never <9,5) and / or Work and presentation (30% never <a 9, 5). Tutoring classes accompany students in the preparation of the work and clarification of doubts.
The continuous evaluation or the final evaluation by examination allows to determine the degree of acquisition of knowledge about the different subjects taught. Students with Statute of Student Workers may choose to carry out continuous evaluation or the completion of the Exam (theoretical) and the preparation and presentation of the work.
Theoretical exam (70% never <9,5) and / or Work and presentation (30% never <a 9,5).

2 - Period assessment

Two theoretical assessment tests are carried out (average> = 9.5; none <8.5). The value obtained weights 60% of the final value, the remaining 40% is attributed to the evaluation of the practical component (weighted average of the oral and written evaluation moments determined) always greater than 9.5. (average> = 9.5; none <8.5)

3 - Examination assessement

If the student has not met the above conditions, i.e. 2 theoretical Assessment tests (average <9.5 and none <8.5) (60%) and/or Work and presentation (<9.5) (40%), they will have to sit an exam for the theoretical or practical component of the course, depending on the grade obtained.

Bibliography

1 - Main Bibliography

Bibliografía principal
Boskou D.. Química y Tecnologia del Aceite de Oliva. AMV Ediciones Mundi-Prensa. Madrid 1998.
Saldanha M. H.
Delanoe D., Maillard C. e Maisondieu .Carvalho B. e Correia L. Carvalho M. Vinho da Análise à Elaboração. Euroagro, 1997.
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Luquet F.M. Leche y Productos Lacteos. Ed. Acribia. Zaragoza, 1993.
Luquet FM.. Vega A R. e García F. P.. O Leite. Producción y Comercialización de Leche y Queso de Cabra en Extremadura. Publ. Junta de Extremadura. Badajoz 1996.
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Navarre C.. Enologia Técnicas de Produção do Vinho. Colecção Euroagro, Publicações Europa-América, 1997.
Ough C. S.. Tratado Básico de Enologia. Ed. Acríbia. Zaragoza, 1992. Johnson H.
Pato O. O Vinho Sua Preparação e Conservação. Nova Colecção Técnica Agrária 2. Clássica Editora. Lisboa, 1992.
Peynaud E. e Blouin J. O Gosto do Vinho. O Grande Livro da Prova. LITEXA. Lisboa, 1996.
Rebelo A.G.. Queijaria Racional. Publ. Ministério da Agricultura. Lisboa, 1994.
Robinson J. Curso de Vinhos. Livros Cotovia. Lisboa, 1999.
Werner Frey. Fabricación Fiable de Embutidos. Ed. Acribia. Zaragoza 1995.

2 - Complementary Bibliography

Bibliografía complementar
A Indústria das Carnes Uma perspetiva integrada. Seminário na Escola Superior de Biotecnologia da UCP. Porto 1994.
Graça J.C.F Ciência da Carne conceitos atuais sobre limpeza e refrigeração de carcaças. Publ. Ciência e Vida. Lisboa, 1987.
Machado L. C. A fileira da carne de porco diagnóstico sectorial. MADRP 2001.
Nunes, A.F.. Leite : mecanismos de produção. Fenalac, 2004.
Vinhos de Portugal. publ. Dom Quixote. Lisboa, 2000.
Warriss P. D. Ciencia de la carne. Ed. Acribia 2003.

Special Situations

[Students with special status]

1 - Period assessment - Students with special status

	Students with special status can opt for continuous assessment, two theoretical assessment tests (60%) and oral assessment of the practical component (the preparation of a report on one of the study visits or a specific topic, and subsequent oral presentation (min.10: max.20 min)) (40% never < 9.5). **2 - Examination assessement - Students with special status** Theoretical exam (60% never <9.5) and marks for the evaluation of the Practical component (the preparation of a report on one of the study visits or a specific topic and subsequent oral presentation (min.10: max.20 min)) (40% never <9.5).