Information about the subject

Degree: Bachelor of Science Degree in Human Nutrition and Dietetics

Faculty: Faculty of Medicine and Health Sciences

Code: 1310310 **Name:** Culinary Technology

Credits: 6,00 **ECTS Year:** 3 **Semester:** 1

Module: Food Science Module

Subject Matter: Culinary Technology **Type:** Compulsory

Field of knowledge: Health Science

Department: Nutrition

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

Food Science Module

Subject Matter	ECTS	Subject	ECTS	Year/semester
Bromatology	6,00	Bromatology	6,00	2/1
Food Technology	6,00	Food Technology	6,00	2/1
Culinary Technology	6,00	Culinary Technology	6,00	3/1
Microbiology	6,00	Microbiology and Parasitology	6,00	1/2
Toxicology	6,00	Food Toxicology	6,00	2/2

Recommended knowledge

Not established

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1 Understand and assimilates the concepts included in the course content.

R2 Shows ability to solve problems related to these contents using different resources.

R3 Demonstrates ability to work in a laboratory performing correctly the basic operations and observing the corresponding security rules. As well as a correct understanding of the planning, development and purpose of the experience.

R4 Understands and adequate uses language, as well as correct writing and presentation of data.

R5 Collaborates with the teacher and colleagues throughout the learning process: Attendance to theoretical, practical or tutoring sessions; teamwork; respect in the treatment; compliance with the rules of organization of the subject for the benefit of all.

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB2	Students know how to apply their knowledge to their work or vocation in a professional way and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.			x	

GENERAL		Weighting			
		1	2	3	4
CG09	Students know the basic processes in the elaboration, transformation and conservation of foods of animal and vegetable origin.				x

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R5	5,00%	Evaluation of the use of the practical classes in the classroom, of problems or computers, seminars and tutorials. Through attendance, and participation in the different activities proposed.
R1, R4	55,00%	Written evaluation of the knowledge and skills obtained. The test may consist of a series of open-ended or multiple-choice questions on the theoretical content of the subject and/or practical exercises (problem solving).
R2, R3, R5	20,00%	Assessment of practical laboratory work, or laboratory culinary techniques workshop, through which the competencies acquired must be demonstrated and that they are capable of being used to solve the different situations and problems that arise in a laboratory; this assessment may be carried out by one of the following methods, or a combination of several of them: an individual written test, the individual or group performance of a laboratory experience, the submission of an individual or group report on the work carried out in the laboratory
R2, R3	20,00%	Evaluation of individual or group practices or activities, in which information related to each of the subjects must be sought and structured, and cases or problems resolved. This is done through a system of continuous evaluation throughout the course, which involves the delivery and / or exposure of work, whose objectives and content will be proposed by the teacher.

Observations

The course provides for several elements of assessment:
1. a theory exam at the end of the course (55%)

2. a practical exam at the end of the course (10%) + the delivery and evaluation of the practical dossiers (10%).
3. a continuous assessment consisting of an individual written work to be done throughout the course (20%).
4. the delivery of activities in class that count for attendance and participation (5%).
The mark for the course will be the weighted average of all the evaluations.
IMPORTANT:
- Attendance to practicals, as well as the delivery of dossiers is compulsory. In order to be able to take the practical exam, it will be necessary to have attended at least 75% of the practicals and to have previously handed in the corresponding dossiers.
- The continuous assessment activities and the class activities (points 3 and 4 of the assessment) must be handed in before the end of the course period. There is no provision for these assignments to be made up.
A minimum mark of 4 in the theory and practical exams is required to obtain an average.

MENTION OF DISTINCTION:
In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1 Exposition of contents by the teacher, analysis of competencies, explanation and demonstration of capacities, skills and knowledge in the classroom. The blackboard, the computer and the cannon will be used to display texts, graphics, etc.

M2 Resolution of practical exercises and case studies, analysis of evaluation procedures and procedural intervention. All this with the support of the teacher. This aspect can be controlled through attendance and active participation in the practical sessions.

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M5 Student study: individual preparation of readings, essays, problem solving, seminars, papers, reports, etc. for discussion or delivery in electronic format.

M6 Application and sharing of multidisciplinary knowledge This is the resolution of a problem that in its subsequent professional practice would require the application of skills acquired through the development of the modules and that would produce synergies in the assimilation of transversal and specific skills. Group work competences will be specifically evaluated.

M8 A set of tests, written or oral, used in the evaluation of the student.

M9 Group preparation of readings, essays, problem solving, seminars, papers, reports, etc... for discussion or delivery.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical lessons M1	R1, R2, R4, R5	31,00	1,24
Practice lessons M2	R3, R4, R5	10,00	0,40
Laboratory M3	R3, R4, R5	15,00	0,60
Office Hours M3	R4, R5	2,00	0,08
Evaluation M8	R1, R2, R4	2,00	0,08
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Autonomous work M5	R3, R5	80,00	3,20
Group work M9	R1, R2, R3, R4, R5	10,00	0,40
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
PART 1. INTRODUCTION. GENERAL CONCEPTS.	Introduction to culinary technology and definition and objectives of culinary technology. Some historical milestones in culinary technology. Collective cooking. Definition of cuisine. Classical cuisine. Types of catering. Kitchen and dining room staff. Key factors in the evolution of collective catering. Identification of the variants of collective catering. The culinary space. Zones and rational organisation of the culinary space. Kitchen machinery. Menu design and technical specifications. Scandallos.
PART 2. RECEPTION, STORAGE AND HANDLING OF RAW MATERIALS	General concepts on preservation of raw materials Reception, storage and handling of raw materials
PART 3. CULINARY OPERATIONS AND PROCESSES AT ROOM TEMPERATURE	Previous operations of selection, cleaning and division In meats In fish In vegetables Ingredient joining operations Fluid mixing Classification of dispersed systems
PART 4. INTRODUCTION TO CULINARY PROCESSES WITH THE APPLICATION OF HEAT	Definition and types of cooking Cooking equipment Sources of heat energy Heat transfer to food Kinetics of heat transfer The primary and secondary process of heat transfer Chemical changes during cooking Physical changes during cooking Classification of types of cooking

PART 5. COOKING TECHNIQUES	Types of cooking in non-liquid media Direct and reverse sealing Equipment and working conditions Effects on food Culinary applications
PART 6. FAT AS A MEDIUM OF COOKING	Scheme of a fry Types of cooking in a fatty medium Equipment and working conditions Properties of frying fat Effects on food Culinary applications
PART 7. COOKING TECHNIQUES IN AQUEOUS MEDIUM	The role of water Types of cooking in aqueous medium Equipment and working conditions Effects on food Culinary applications
PART 8. MIXED CULINARY TECHNIQUES	Stir fry Sautéed Sweaty Braised Poached
PART 9.MICROWAVE COOKING	Physical principle of radiation Materials for cooking Depth of penetration and heating Security
PART 10.SPECIAL CULINARY TECHNIQUES	Key lines of molecular cuisine Some proper names New cooking techniques Machinery and utensils New ingredients
PART 11. THE MASSES	Scalding Fermented Ravines Shakes Puff pastry

PART 12. CULINARY TECHNIQUES FOR DIETOTHERAPY	Allergens Elimination and / or substitution of ingredients Changes in culinary techniques
PART 13. PRACTICES	Practice 1: Preparatory operations. Practice 2: Culinary techniques 1. Practice 3: Culinary techniques 2. Practice 4: Masses.

Temporary organization of learning:

Block of content	Number of sessions	Hours
PART 1. INTRODUCTION. GENERAL CONCEPTS.	3,00	6,00
PART 2. RECEPTION, STORAGE AND HANDLING OF RAW MATERIALS	1,00	2,00
PART 3. CULINARY OPERATIONS AND PROCESSES AT ROOM TEMPERATURE	4,00	8,00
PART 4. INTRODUCTION TO CULINARY PROCESSES WITH THE APPLICATION OF HEAT	3,00	6,00
PART 5. COOKING TECHNIQUES	3,00	6,00
PART 6. FAT AS A MEDIUM OF COOKING	1,00	2,00
PART 7. COOKING TECHNIQUES IN AQUEOUS MEDIUM	1,00	2,00
PART 8. MIXED CULINARY TECHNIQUES	1,00	2,00
PART 9.MICROWAVE COOKING	1,00	2,00
PART 10.SPECIAL CULINARY TECHNIQUES	1,00	2,00
PART 11. THE MASSES	2,00	4,00
PART 12. CULINARY TECHNIQUES FOR DIETOTHERAPY	1,00	2,00
PART 13. PRACTICES	8,00	16,00

References

BASIC
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Pérez, N., Mayor, G., Navarro, V.J. (2009). Técnicas culinarias, Síntesis, Madrid
Monografía The Culinary Institute of America (CIA). (2008) The Professional Chef 8th Edition with Student Study Guide Set Wiley
COMPLEMENTARY:
Marín C., Cárdenas Y. (2010). Procesos básicos de pastelería y repostería. Ed. Brief s.l. Valencia
Varela, G.; coord. Libro Blanco de la Nutrición en España. Fundación Española de la Nutrición (FEN), Ed. 1ª Madrid: Editorial Madrid; 2013. Wright, J. y Treuille, E. Guía completa de las técnicas culinarias (Le Cordon Bleu) 3ª Ed. Barcelona: Ed. Blume; 2014.
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Ordóñez, J.A. y García de Fernando (Eds.) (2014), Tecnología de los alimentos de origen animal (Vol. 1. Fundamentos de química y microbiología de los alimentos), Síntesis, Madrid.
Armendáriz, J.L. (2001). Procesos de cocina. Ed. Thomson-Paraninfo. Madrid.
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Cambón, C., Martín, S., Rodríguez, E. (2007). Ciencia a la cazuela. Madrid. Alianza Editorial.
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This, H. (1996). Los secretos de los pucheros. Ed. Acribia. Zaragoza
This, H. (2000). La cocina y sus misterios. Ed. Acribia, Zaragoza
Roca, J. y Brugués, S. (2003). La cocina al vacío, Montagud, Barcelona

OTHERS:
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Ruíz, J. Cocina al vacío y a temperaturas controladas. SEBBM [Internet]. 2010 [consultado 16 junio 2021]; 166. Disponible en: https://www.sebbm.es/revista/repositorio/pdf/166/d02166.pdf
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Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

[X] Microsoft Teams

[ ] Kaltura

Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

[X] Microsoft Teams

[ ] Kaltura

Explanation about the practical sessions:

The practices will be carried out according to what is established in the course guide.
All practices will be done through TEAMS. This medium will be used to explain the practice, view videos and resolve any doubts that may arise in the time established for its preparation. The delivery of the dossiers will be carried out as planned at the beginning of the course.

2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

[X] The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

[ ] The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System: