

63015 - Advances in technology of foods from vegetal origin

Syllabus Information

Academic Year: 2020/21

Subject: 63015 - Advances in technology of foods from vegetal origin

Faculty / School: 105 - Facultad de Veterinaria

Degree: 566 - Master's in Food Quality, Safety and Technology

ECTS: 3.0

Year: 1

Semester: Second semester

Subject Type: Optional

Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. The teaching and learning tasks implemented are:

- Lectures: theory sessions supported by audiovisual media, where the lecturer explains the fundamentals of the techniques complemented with supplementary material such as tables and graphs, and webpages.
- Practice sessions: sessions, lasting 2-3 hours, will be held in classroom and laboratory. The development of new processes and products will be analyzed relying on information from scientific articles, specialized books and webpages. Students will prepare a presentation in small groups with the conclusions of these sessions to be presented and discussed with the whole class.

4.2.Learning tasks

The course includes the following learning tasks:

- Lectures
- Practice sessions in the laboratory and classroom where students analyze case studies.

4.3.Syllabus

The course will address the following topics:

Lectures (15 hours)

SESSION 1. Introduction to the fruit and vegetal sector: current problems and trends in the fresh and derived products

SESSION 2. New conservation technologies

SESSION 3. Clean technologies for the disinfection of vegetable products

SESSION 4. Technological and nutritional aspects of the innovation in the sector of cereals, legumes and pseudocereals

SESSION 5. Technological and nutritional aspects of the innovation in the sector of oil derived products

Practice sessions (15 hours)

SESSION 1: New methods of preservation of fruits and vegetables (2 sessions)

SESSION 2: New technologies for the sanitation of fruits and vegetables (2 sessions)

SESSION 3: Instrumental and sensory analysis of cereals and cereal products

SESSION 4: Olive oil tasting

4.4.Course planning and calendar

Further information concerning the timetable, classroom, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the Faculty of Veterinary website <http://veterinaria.unizar.es/>

4.5.Bibliography and recommended resources

The recommended bibliography is consulted through the web page: <http://psfunizar7.unizar.es/br13/eBuscar.php?tipo=a>

- BB** Advances in fresh-cut fruits and vegetables processing / edited by Olga Martín-Belloso, Robert Soliva-Fortuny Boca Raton : CRC Press, 2011
- BB** Aparicio, Ramón. Manual del aceite de oliva / Ramón Aparicio, John Harwood. - 1ª ed. Madrid : Madrid Vicente; Mundi-Prensa, 2003
- BB** Blankenship, Sylvia. Ethylene Effects and the Benefits of 1-MCP. En: Perishables Handling Quarterly, 2001 , núm 108, p. 234-294.
- BB** Civantos López-Villalta, Luis. Obtención del aceite de oliva virgen / Luis Civantos López-Villalta . - 2ªed. corr. y amp Madrid : Editorial Agrícola Española, D.L. 1999
- BB** Fisiología y manipulación de frutas y hortalizas post- recolección / R.H.H. Wills ... [et al.] ; traducido del inglés por Justino Burgos González Zaragoza : Acribia, D.L.1984
- BB** Kader A.A ; Zagory, D. ; Kerbel, E. L. Modified atmosphere packaging of fruits and vegetables. En : Critical reviews in food science and nutrition, en. 1989, vol 28, núm 1, p.1-30.
- BB** Lawson, Harry. Aceites y grasas alimentarios : tecnología, utilización y nutrición / Harry Lawson ; [traducido por Francisco Javier Carballo García] Zaragoza : Acribia, D. L. 1999
- BB** Madrid, A.. El aceite de oliva. Tecnología, análisis sensorial y denominaciones de origen / A. Madrid AMV Ediciones, 2016
- BB** Monteleone, E. Olive oil sensory science / Monteleone, E. ; Langstaff, S. Wiley Blackwell, 2014
- BB** Postharvest technology of horticultural crops / Adel A. Kader, technical editor . - 3rd ed. Oakland, California : University of California, 2002
- BB** Vera Hernández, Manuel. Aceite de oliva virgen extra : su obtención y conservación / Manuel Vera Hernández . - 1ª ed. Madrid : A. Madrid Vicente, 201