

Academic Year/course: 2021/22

29207 - Food Toxicology

Syllabus Information

Academic Year: 2021/22

Subject: 29207 - Food Toxicology

Faculty / School: 229 - Facultad de Ciencias de la Salud y del Deporte

Degree: 441 - Degree in Human Nutrition and Dietetics

ECTS: 6.0

Year: 1

Semester: Second semester

Subject Type: Compulsory

Module:

1. General information

2. Learning goals

3. Assessment (1st and 2nd call)

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions and laboratory sessions.

4.2. Learning tasks

This course is organized as follows:

- **Lectures** (20 hours). Expositive, explanatory and/or demonstrative sessions of contents, using blackboard and/or audiovisual material with computer support
- **Group seminars** (28 hours) to solve problems and cases.
- **Practice sessions** (8 hours). They will take place in the toxicology laboratory, in groups of approximately 8 students.
- **Computer sessions** (30 hours). Workshop for learning by carrying out practical cases

4.3. Syllabus

This course will address the following topics:

Lectures

- 1. Introduction to toxicology.
- 2. Chemical and biochemical concepts.
- 3. Toxicokinetic.
- 4. Toxicodynamic. Carcinogenesis.
- 5. Etiology, clinic and treatment of toxicity poisoning.
- 6. Toxicity evaluation. Exposure assessment.

- 7. Toxicological implications of food technology.
- 8. Naturally occurring toxic substances in food. Animal and plant toxins.
- 9. Mycotoxins.
- 10. Food additives. Colorants, preservatives and drugs used in animals.
- 11. Organic solvents
- 12. Metal toxicity
- 13. Toxicity of pesticides
- 14. Toxicity of plastics
- 15. Toxicity of gases
- 16. Epidemics toxic food

Lab sessions

- Theory sessions: Analytical techniques (2 hours)
- Practice of analytical toxicology: Tinsley reaction and thin layer chromatography (6 hours)

4.4. Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the Facultad de Ciencias de la Salud y del Deporte website and the Degree website (<https://fccsyd.unizar.es/nutricion/grado-nutricion>).

4.5. Bibliography and recommended resources

<http://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=29207>