

Subject Name:

Quality of animal-based foodstuff

Course Type:

Lectures/Collaborative work/Practical training (24 hours in total)

Outline:

Animal foodstuff quality is currently assessed using techniques either equivalent to those used for plants or using specific techniques. In this training program the animal foodstuff quality and its assessment will be presented via theoretical and practical methods. The quality assessment proposed is:

1. a sensory and textural evaluation (mechanical approach / rheology) of animal based food-stuff following the food standard evaluation system adopted in Europe
2. a composition evaluation based on nucleic acid detection and identification in order to characterize fraudulent use of animal matter in processed food.

The team is currently developing original and innovative methods based on aptamers for taste evaluation of animal-based foodstuff. The practical training will take benefit of this innovative approach.

The team is also developing laboratory analysis using DNA probes specific of animal material. This allows checking for the identity of the food-products used to prepare processed food.

Semester Schedule and Credit:

<u>Subject</u>	<u>Year</u>	<u>Semester</u>	<u>Day/Period</u>	<u>Credit</u>
Quality of animal-based foodstuff	2	Fall		1

Location:

University of Bordeaux (UB)

Instructor Information:

Prof. Dominique ROLIN (UB), Prof Maria URDACI (BSA), Ass Prof Marie-Pierre ELLIES, Dr Guillaume DURAND (BSA), Ing Anne-Marie ELIE (BSA)

General Instructional Objective (GIO):

Beside lectures presenting the different criteria on which animal-based foodstuff could be analyzed according to the European standards practical training will be organized to show how the sensory and textural evaluation (mechanical approach / rheology) can be determined on animal-based foodstuff and how DNA analysis can help detecting frauds.

Specific Behavioral Objectives (SBO):

Students will learn about the animal-based Foodstuff quality criteria. They will be asked to perform practical analysis.

Course Overview/Schedule:

1. Lectures by specialists of animal-based food quality.
2. Analysis of the European Regulation on food quality assessment
3. Practical training in food quality assessment.

Homework:

To prepare a synopsis on food quality assessment to be presented as a conference to other students.

To prepare the practical training sessions.

Grading Method and Criteria:

Students are evaluated on their attendance to lectures and on their analysis of the European regulation in food quality assessment. This work performed in small groups will be presented to other students. Each student has to take part in the presentation. Both the clarity and the accuracy of the presentations will be quoted. Each student will also have to answer to precise questions from the audience. The accuracy of their answer will be evaluated. The students will have to report on the practical training. The report will be quoted.

Students who attend of the course and satisfy all requirements

Textbook/ Referenced Materials: European Regulations on food quality assessment. Practical textbook, DNA probes, flavoring compounds.

Notes: None