Academic subject: FOOD SAFETY 1			
Degree Class: LM-86		**Degree Course:** Safety and Health of Food of Animal Origin	**Academic Year:** 2020/2021
		Kind of class: mandatory	**Year:** II / **Period:** Semester I
			ECTS: 6 divided as follows: **ECTS lessons: 5** **ECTS exe/lab/tutor: 1**
Time management, hours, in-class study hours, out-of-class study hours lessons: **60** exe/lab/tutor: **25** in-class study: 0 out-of-class study: **65**			
Language: **ITALIAN**	**Compulsory Attendance:** NO		
Subject Teacher: DI PINTO ANGELA	**Tel: +390805443878** **e–mail:** angela.dipinto@uniba.it	**Office:** Department of Room Floor	**Office days and hours:** Receives by appointment via email
Prerequisites: It is desirable that the student have knowledge and skills relating to the topics of microbiology, chemistry, biochemistry and the hygiene measures practiced on livestock farms.			
Educational objectives: The course aims to provide scientific knowledge relating to health and hygiene requirements, hazards and methods of prevention and management thereof within milk, dairy product, and egg and egg-product supply chains. The course aims to analyze the general principles and requirements of European and national legislation on hygiene and safety in specific sectors and schedules educational visits to food production companies in order to transfer practical knowledge relating to the prevention and management of hazards, and to sanitation in the animal origin supply chains of interest.			
Expected learning outcomes (according to Dublin Descriptors)	**Knowledge and understanding:** Students need to know the hygiene and Safety Requirements for milk and milk products, mollusks, and fishery products. Students must know the European and national legislative provisions on food safety. **Applying knowledge and understanding:** Students need to apply skills regarding health and hygiene hazards, the methods of prevention and management within the specific animal origin supply chains and must know the main European and national legislative provisions on the safety of food of animal origin. **Making judgements:** Students need to make autonomous analyses concerning food safety. **Communication:** Students need to acquire the ability to express ideas regarding food safety during the course in a personal and competent way. **Lifelong learning skills:** Students need to demonstrate autonomy in adopting methods to prevent and manage health and hygiene hazards within the animal origin supply chains of interest and the ability to navigate the main European and national legislative provisions on safety regarding foods of animal origin. Students need to demonstrate autonomy in reading, analyzing, and communicating texts on food safety, in order to facilitate subsequent studies and enhance student autonomy. Students need to demonstrate use of the scientific language.		
Course program **Introduction.** EU Food Laws: general principles and requirements concerning food safety. Risk analysis methodologies according to the principles of the Codex Alimentarius. Pre-requisite programs, Good Hygiene Practices (GHP) and Good Manufacturing Practices (GMP). Hazard Analysis and Critical Control Point (HACCP) system and guidelines for its application. **Milk and dairy products.** European legislation for milk and milk products. Safety requirements for raw milk production. Hygiene on milk production holdings. Criteria for raw milk requirements concerning dairy products. Wrapping and packaging. Requirements for heat treatment. Labelling and identification marking. Milk and Milk Products: processing techniques. Risk assessment and management of milk and dairy products. **Live bivalve molluscs.** general requirements for the placing on the market of live bivalve molluscs. Hygiene			

requirements for the production and harvesting of live bivalve molluscs. Structural and hygiene requirements for dispatch and purification centres. Safety requirements for live bivalve molluscs. Wrapping and packaging of live bivalve molluscs. Identification marking and labelling.

Fishery products. European legislation for fishery products. Requirements for vessels. Requirements during and after landing. Requirements for fresh fishery products. Requirements for frozen products. Requirements for mechanically separated fishery products. Requirements concerning parasites. Requirements for processed fishery products. Safety requirements for fishery products. Wrapping and packaging of fishery products. Storage of fishery products. Transport of fishery products. Risk assessment and management of fishery products.

Teaching methods: Lessons are held in the classroom with the aid of multimedia devices such as PCs, projectors, internet connections that allow viewing of PowerPoint files and educational videos/films. Practical activities include educational visits to food companies operating in the sectors of interest and laboratory exercises at the facilities of the Food Safety section. Students are divided into groups and followed individually, when performing the laboratory tests required on the course, by the course leader and collaborators. Considering the average number of students enrolled on the course, this will require at least 3 shifts for each laboratory exercise.

Auxiliary teaching: White coat or disposable coat, disposable gloves, cap (optional) for laboratory exercises.

Assessment methods: The oral exam aims to evaluate the achievement of the course objectives, i.e. knowledge of the subject, the ability to use appropriate terminology, to critically address methodological problems and the correctness of regulatory references.

Bibliography:

Cenci Goga – Ispezione e controllo degli alimenti. Point Veterinaire Italie.
EU Food Laws