

HEALTH AND FOOD SAFETY

Academic Course 2013-14

| MÓDULO | MATERIA | CURSO | SEMESTRE | CRÉDITOS | TIPO |
|---|--------------------------------|-------|--|----------|---------|
| HYGIENE FOOD SAFETY AND QUALITY MANAGEMENT | HYGIENE AND FOOD SAFETY | 3º | 1º | 6 | TRONCAL |
| TEACHER | | | | | |
| <ul style="list-style-type: none"> Marina Villalón Mir marinavi@ugr.es | | | DEPARTMENT OF NUTRITION AND BROMATOLOGY College of Pharmacy . Campus Cartuja S/N 18071 Granada | | |
| | | | TUTORING SCHEDULE | | |
| | | | Monday, Tuesday and Thursday (de 9:30- 11:30h) | | |
| | | | OTHER DEGREE TO WHICH COULD BID | | |
| Degree in Human Nutrition and Dietetics | | | Degree in Science and Food Technology | | |
| RECOMMENDATIONS | | | | | |
| <ul style="list-style-type: none"> Having studied the subjects: Food Microbiology, Parasitology Food Toxicology Food and Culinary Technology. <p>Having adequate knowledge of:</p> <ul style="list-style-type: none"> Food Science Food Technology | | | | | |
| DESCRIPTION OF CONTENTS | | | | | |
| <ul style="list-style-type: none"> Hygiene, food safety and risk control systems. Training of professional food service. Implementation and monitoring of Quality Systems and General Hygiene Plans Food traceability. Advice on aspects of advertising, health claims and collaboration in consumer protection | | | | | |
| GENERAL AND SPECIFIC COMPETENCIES | | | | | |
| <ul style="list-style-type: none"> GENERAL COMPETENCIES: CG6.1: Assist in the development, marketing, labeling, marketing communications and food products according to the social, scientific and law. | | | | | |



CG7.1: Participate in the management, organization and development of food services.

CG7.2: Develop, monitor and cooperate in planning menus and diets tailored to the characteristics of the group to which they are intended.

CG7.3: Intervening in the quality and safety of food products, facilities and processes.

CG7.4: Provide health and hygiene training and proper diet and nutrition staff involved in catering.

• **SPECIFIC COMPETENCIES**

CEM3.1: Develop, implement, evaluate and maintain proper hygiene practices, food security and risk control systems, applying the law.

CEM3.2: Participate in the design, organization and management of the various food services

CEM3.3: Assist in the implementation of quality systems.

CEM3.4: Assess, monitor and manage aspects of traceability in the food chain.

CEM3.5 : Know the aspects related to the economy and food business management

CEM3.6: Scientific and technical advice on foodstuffs and development thereof. Evaluate compliance with such advice

CEM3.7 : Participate in social marketing business equipment, advertising and health claims

CEM3.8: Collaborate on consumer protection in the context of food security.

OBJECTIVES (EXPRESSED AS EXPECTED RESULTS OF EDUCATION)

Knowing what the current legislation regarding food safety and be able to develop new safety standards and food make an inspection.

Can develop for a company catering food and quality control systems food (Hazard Analysis and Critical Control Points and General Hygiene Plans).HACCP

Power advise food businesses and catering aspects related to quality, food safety and the development of new products and labeling them.



DETAILED AGENDA COURSE

Item 1. Introduction. Concept of hygiene and food safety. Historical evolution. Current Importance. Objectives. Framework and strategies in food security policy.

Item 2. Dietary alterations. Pollution-causing agents. Polluting residue concept. Routes of food contamination. Routes of direct contamination. Indirect contamination pathways. Cross contamination. Foods high risk. Frauds and food adulteration.

Item 3. Self systems in the food sector: definition and objectives. General Hygiene Plans. Definition. Objective and current importance. Basic principles of hygiene General Plans. Basis for implementation in the food business.

Item 4. System hazard analysis and critical control points (HACCP). Objectives. Definition of hazards and critical control points. Principles and advantages of HACCP. Design and verification of the flowchart. Hazard analysis and preventive measures. Critical control points, critical limits, monitoring systems and corrective actions. Documentation and records.

Item 5. Food handling. Practice good hygiene. Unacceptable practices. Control of visits to the food handling area. Current Importance of the food handler. Handlers higher risk. Training process and control.

Item 6: Drug Policy and recipes hygiene standards. Standards of hygiene in the preparation and handling of cooked dishes

Item 7: The catering facilities. Planning. Flows and interactions between workspaces. Spaces restoration. Standards of hygiene: Floors, walls, ceilings, doors and windows. Areas of work and accessories. Other facilities. Sheets cleaning frequency control.

Item 8: Management and control of hygienic quality in catering companies and food service cooked. General aspects of quality management and control. Management and Quality Control inbound logistics. Management and quality control in production operations. Management and quality control in the outbound logistics.

Item 9: The equipment and machinery in the catering business. Nature and types of equipment and machinery. Microbial Management and maintenance. Equipment selections. Standards of hygiene equipment and machinery.

Item 10: Provider. Receipt of goods. Types of providers Industries Health Registry. Freight Hygiene. Hygiene in the reception of goods. Shopsystems. Irregularities in purchases. Hygiene standards.

Item 11: Storage of goods. The dry storage. Standard hygiene products dry store (commissary). Refrigeration Food Storage. Frozen Storage.

Item 12: Cooking and reheating. Temperatures. Thermometers. Hygiene standards thermometers. Records of validation and calibration of thermometers. Keeping food hot. Cooking and reheating policy and hygiene standards

Item 13: Cleaning Management caterers. Control cleaning policy: the items to be cleaned and the cleaning. The frequency of cleaning sheets. Cleaning and disinfection programs. Preventive control measures

Item 14: Management and Control of garbage.

Item 15: Management of pest control in the catering business. Pest Control Policy and hygiene standards. Preventive and control risks in kitchens and catering establishments.

Item 16: Management and control of food packaging. Food packaging and catering application. Hygienic packaging and hygiene standards in restaurants.

Item 17: Role of conservation of container and its application in restoration. Role of passive protection. Role of active protection. Active packaging systems. Intelligent Packaging



Item 18. Practical application of a quality assurance system. General specifications and requirements. Identification data and activity.

Item 19: Poisoning and emergencies. Choice of parameters Setting tolerance limits and corrective measures. Procedures to follow in case of Food Poisoning. Policy Emergency Management Standards and Food Hygiene Emergency front

PRACTICAL AGENDA

1º Laboratory Practice:

Practical case nº 1: Inspection and seafood

- Determination of freshness: appreciation by the organoleptic
- Identification of conservatives.
- Determination of total volatile nitrogen and trimethylamine

Practical case nº 2: Fraud detection of milk adulteration

- Watered down milk.
- Skimming milk
- Determination of chloride in milk and cheese.
- Control of heat treatment and homogenization of milk.

Practical case nº 3: Training of food handlers.

- Test dietary risk assessment in the kitchen
- Video about real situations correct handling practices in catering.
- Workshop training for food handlers in catering kitchen

Practical case nº4: Hygienic control of the steps involved in the preparation of a hot plate. Beef stew. **Stages of the HACCP plan.** Work templates. **Control Sheets.**

Practical case nº5: Hygiene and control of consumption eggs.

- External examination of the egg
 - No instrumental
 - Use ovoscope
 - Technique of ultraviolet light
- Internal review Egg
- Commercial classification: weight
- Morphological Index
- Determination of ph
- egg carton labeling
- Egg dialing code

2º Field Practices: are voluntary and in a small number of students as they schedule a visit to a catering kitchen for hospital service.

REFERENCES BIBLIOGRAPHYS

BASIC BIBLIOGRAPHY:

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- FEHLHABER K, JANETSCHKE P. Higiene veterinaria de los alimentos. Zaragoza. Ed. Acribia, 1995.
- FORSYTHE SJ, HAYES PR. Higiene de los alimentos, microbiología y HACCP, 2.ª ed. Zaragoza. Ed. Acribia, 2002.
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 - Unión Europea. Libro Blanco sobre Seguridad Alimentaria. Comisión de las Comunidades Europeas. Bruselas, 2000.
 - World Health Organization Foodborne disease outbreaks: guidelines for investigation and control World Health Organization.

RECOMMENDED LINKS

- **Agencia Española de Seguridad alimentaria y Nutrición:** www.aesan.msc.es/ Pagina Oficial de la Agencia Española de Seguridad Alimentaria donde se puede encontrar datos sobre campañas alimentarias y de seguridad.
- **Autoridad Europea de Seguridad Alimentaria:** www.efsa.europa.eu. Pagina Oficial de la Unión Europea donde se puede encontrar datos sobre campañas alimentarias y de seguridad
- **Calidad Alimentaria.net:** www.calidadalimentaria.com.



- **Codex Alimentarius:** www.codexalimentarius.net/web/index_es.jsp
- **European Centre for Disease Prevention and Control:** www.ecdc.europa.eu
- **European Food Information Council (EUFIC):** www.eufic.org/index/es/
- **FAO/WHO Global Fora and Regional Conferences on Food Safety (FAO):** www.foodsafetyforum.org
- **FDA's Center for Food Safety and Applied Nutrition:** www.cfsan.fda.gov
- **Federación Española de Hostelería:** www.fehr.es
- **Federación Española de Industrias de Alimentación y Bebidas (FIAB):** www.fiab.es
- **Food and Agriculture Organization:** www.fao.org
- **Guía VETA. Guía de Sistemas de Vigilancia de las Enfermedades Transmitidas por Alimentos (VETA) y la Investigación de Brotes:** <http://epi.minsal.cl/epi/html/software/guias/VETA/E/homepage.htm>
- **International Portal on Food Safety, Animal and Plant Health:** www.ipfsaph.org
- **Legislación Unión Europea:** eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:364:0005:0024:ES:PDF
- **Organización Mundial de la Salud:** www.who.int/foodsafety/fs_management/infosan/en/
- **Portal de Tecnologías y Mercados del sector alimentario:** www.alimentatec.com
- **Seguridad Alimentaria (CONSUMER EROSKI):** www.consumaseguridad.com
- **Seguridad Alimentaria:** www.seguridadalimentaria.com
- **Seguridad Alimentaria. Disposiciones Generales:** www.europa.eu/legislation_summaries/food_safety/general_provisions/index_es.htm

