

**Salahaddin University**

**College of Agriculture**

**Department of Food Technology**

**Subject: Food Safety**

**Course Book – second Year Students**

**Lecturer's name: Dr. Payman Ali Kareem& Dr. Khanzad K. Jarjees**

**Academic Year: 2017/2018**

**Meeting time: Tuesday, 12:30 pm-2:30 pm (Theory)**

 **Monday, 8:30 am-2:30 pm (Practical)**

**Class room: Hall -7-**

**Course name: Food Safety**

**Department/ College: Food Technology/ Agriculture**

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**Time in (hours) per week Theory: 2 Hours**

 **(Practical): 6 Hours**

* **Course overview:**

Food should be protected from contamination through all the phases it undergoes before reaches to consumer. Sanitation affects every stages of food handling and quality control should be preserved throughout.

Food safety is an important constituent of public health. This course is included basic principles and practice of food safety. I will be giving knowledge about how foodborne illness is transmitted, how it influences public health, and how it can be controlled. Four major components in this course will be investigated:

1. Foodborne pathogens
2. Foodborne chemical and physical hazards,
3. Foodborne biological toxins and allergens, and
4. The administration activities required to ensure food safety and public health. This will contain a debate of food safety administration via sanitation, pathogen and allergen controls in foods. Hazard Analysis Critical Control Points (HACCP), public health policies, and hazard assessment. Finally, it will be designed for all food handlers and is designed to provide the fundamentals of good food hygiene practice.
* **Course objective:**
1. Familiar with most of key terms which are related to the food safety and quality such as Contamination, Danger zone, food sanitation, Health, Hygiene , GMP, CODEX, SPS,OIE and sanitation.
2. In addition, collect information about all types of contaminations in foods with reasons for food spoilage from fields till to reach to the consumers.

 To acquaint the students with concepts of food safety and quality control and quality assurance . This includes four major components Foodborne pathogens, Foodborne chemical and physical hazards, Foodborne biological toxins and allergens, and the administration activities required to ensure food safety and health Quality Factors and Measurement, quality assurance system, Total Quality management and Food legislation.

* **Student's obligation**
1. Attendance is required and will influence course grade.
2. **Silent your mobile or turned off will be better** in class
3. All graded assignments, quizzes, and exams will be returned to students.
4. The course is graded on an absolute grading policy.
5. **Homework:** Homework must be turned in a class by a due date. Late homework will receive a 15% penalty per day. Each assignment will be equally weighed throughout the semester.
6. **Quizzes:** In-class quizzes (typically 15 minutes) will be one problem or several conceptual questions given at the beginning of the lecture. The material covered on the quiz will come from the previous lectures, homework. The quiz will be closed books and notes.
7. **Exams:** One Mid-term and Final exams will be given during the semester. The exams will be closed books and notes.
* **Forms of teaching**

The lecture is a considered of PowerPoint and students have to write notes if we needed.

* **Assessment scheme**

**Grading**

### Grade basis and scale:

Homework, Quiz and participate in the class 5 pts.

Midterm exam 20 pts

Final exam 40 pts

* **Student learning outcome:**

**By the end of this course, Student will be able to:**

 1. Understand the sources of foodborne risk.

2. Understand basic principles of HACCP, GMP and sanitation in general.

3. Understand selected laws and regulations pertaining to food processing.

4. Be able to apply sensory evaluation, detection of microorganisms, physical and chemical properties of foods which are associated to food safety and control and techniques to the study of food

5. Familiar with most of methods of food preservation

* **Course Reading List and References‌:**

**1. SCHMIDT R. H. and. RODRICK G. E. (2003).** Food Safety Handbook,

Published by John Wiley & Sons, Inc., Hoboken **. New Jersey Published simultaneously in Canada.**

**2. Redman, N. E. (2007).Food safety**. Library of Congress Cataloging-in-Publication Data

Redman, Nina, 2nd ed.

 **3. Google search**

* **Topics that will be covered**:

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| **Week** | **Module** |
| **Week 1** | Introduction , Syllabus and instructor policy |
| **Week 2** | Food Safety: Risks Associated with Food: Chemical and Physical |
| **Week 3** | Food Safety: Risks Associated with Food: Microbiological |
| **Week 4** |  Food Safety: Risks: Allergens |
| **Week 5** | Foodborne illness be reduced |
| **Week 6** |  **exam** |
| **Week 7** | Introduction, Steps and regulation of HACCP, GMO and sanitation |
| **Week 8** | HACCP Principles |
| **Week 9** | TWO, SPS, and TBT |
| **Week 10** | CODEX |
| **Week 11** | Food Fraud |
| **Week 12** | **exam** |