



Jordan University of Science and Technology
Faculty of Agriculture
Nutrition & Food Technology Department

NF477 Food Safety

First Semester 2022-2023

Course Catalog

3 Credit Hours. This course deals with the dangers of foodborne contaminations and illnesses caused by bacteria, viruses, parasites and chemicals, sanitation principles and potential problems in food handling systems, essential precautions needed in food handling by looking at selected case histories of foodborne illnesses involving mishandling of foods from publications. The application of HACCP in food processing establishments will be covered also.

Text Book

| | |
|--------------------------|--------------------------------|
| Title | Fundamentals food microbiology |
| Author(s) | A Bhuineh |
| Edition | 5th Edition |
| Short Name | 1 |
| Other Information | |

Instructor

| | |
|------------------------|---------------------------|
| Name | Prof. Ziad Jaradat |
| Office Location | PH1L1 |
| Office Hours | |
| Email | jaradat@just.edu.jo |

Class Schedule & Room

Section 1:
Lecture Time: Mon, Wed : 13:00 - 14:00
Room: PH2104

| Prerequisites | | |
|---------------|-------------------------|----------------------|
| Line Number | Course Name | Prerequisite Type |
| 633771 | NF377 Food Microbiology | Prerequisite / Study |

| Tentative List of Topics Covered | | |
|----------------------------------|--|------------|
| Weeks | Topic | References |
| Week 1 | Introduction to the course | |
| Weeks 2, 3 | Importance of food safety Food safety and sanitation terms Facts in foodborne diseases Foodborne outbreaks: definition, investigation, incidence, cost, causes and affecting factors | |
| Weeks 4, 5, 6, 7, 8, 9 | Biological hazards lead to foodborne illnesses ? Pathogen obstacles in human gut ? Bacteria ? Viruses ? Parasites | |
| Weeks 10, 11 | Chemical hazards lead to foodborne illnesses ? Fish and plant toxins ? Mycotoxins ? Antibiotics and growth hormones ? Allergens and food additives ? Pesticides and cleaning chemicals | |
| Week 12 | Physical hazards lead to foodborne illnesses | |
| Weeks 13, 14, 15 | Food safety management tools: ? GMP ? HACCP | |
| Week 16 | Final exam | |

| Mapping of Course Outcomes to Program Student Outcomes | Course Outcome Weight (Out of 100%) | Assessment method |
|---|-------------------------------------|-------------------|
| Describe food borne pathogens and their potential health hazards [1SLO1] | 15% | |
| Define food toxicants. [1SLO1, 1SLO3] | 15% | |
| Explain microbial survival, growth and destruction in relation to food. [1SLO1, 15SLO3] | 25% | |
| Apply food safety management. [1SLO2, 1SLO3] | 15% | |
| List environmental and equipment sanitation requirement for food safety [1SLO3, 1SLO4] | 10% | |
| Explore food chemical contaminants sources and control [1SLO1, 1SLO2, 1SLO3] | 20% | |

| Relationship to Program Student Outcomes (Out of 100%) | | | | |
|--|-------|------|------|------|
| SLO1 | SLO2 | SLO3 | SLO4 | SLO5 |
| 30.73 | 14.17 | 50.1 | 5 | |

| Evaluation |
|------------|
|------------|

| Assessment Tool | Weight |
|----------------------|--------|
| Mid exam | 30% |
| lab reports and exam | 20% |
| final exam | 50% |

| Policy | |
|---------------|--|
| exam | The exam will cover all lectures as well as material covered in your laboratory manual. The exams will include a variety of questions, true-false, multiple choice, and write short essay questions. |
| Cheating | Plagiarism or any other form of cheating in examinations, term tests or academic work is subject to serious academic penalty. Cheating in examinations or tests may take the form of copying from another student or bringing unauthorized materials into the exam room (e.g., crib notes, pagers or cell phones). Exam cheating can also include exam impersonation. A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty |
| Attendance | Consistent with Jordan University of Science and Technology guidelines, students absent from regularly scheduled examinations because of authorized University activities will have the opportunity to take them at an alternate time. No make-up exams will be given for unexcused absences. |
| Participation | Is necessary for the extra grades (bonus) |
| Lab | Laboratory reports must be handed in. See the laboratory manual for additional information. In addition, the laboratory assignments must be handed in. Late LAB reports or assignments will not be accepted unless instructor approval is obtained in advance of the deadline |
| Withdraw | Consistent with Jordan University of Science and Technology guidelines |

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