

**Syllabus: Food Microbiology/ Practical (140502333)****Second Semester 2021 /2022**

COURSE INFORMATION	
Course Name: Food Microbiology Semester: Second 2021/2022 Department: Clinical Nutrition and Dietetics Sciences Faculty: Applied Medical Sciences	Course Code: 140502333 Section: Core Curriculum:
Day(s) and Time(s): Monday: 8:00-11:00, 11:00-14:00 Classroom: Food Microbiology Lab	Credit Hours: 1 Prerequisites: Medical Microbiology/Practical
COURSE DESCRIPTION	
<p>The course is a practical application of food microbiology. Bacteria and fungi used in food industry, and those that may cause food spoilage. Microbes transmitted with food and toxins produced by these microbes.</p>	
DELIVERY METHODS	
<p>The course will be delivered through a combination of active learning strategies. These will include:</p> <ul style="list-style-type: none"> • PowerPoint lectures and active classroom based discussion • Collaborative learning through small groups acting in an interdisciplinary context. 	
FACULTY INFORMATION	
Name	Dr. Amin Olaimat
Academic Title:	Associate professor
Office Location:	Department of clinical nutrition and dietetics
Telephone Number:	
Email Address:	aminolaimat@hu.edu.jo
Office Hours:	Sunday, Tuesday, Wednesday 12-1 pm
	<i>Please send an e-mail us to meet at any other time.</i>

REFERENCES AND LEARNING RESOURCES

Required Textbook:

1. Adams, M.R. and Moss, M.O.2008. *Food Microbiology*, 2nd edition. Royal Society of Chemistry, UK.
2. Jay, J.M. 2005. *Modern Food Microbiology*. Aspen Publishers, Inc. Gaithersburg, Maryland.

Suggested Additional Resources:

1. Ray, B., and Bhunia, A.K. 2014. *Fundamental Food Microbiology*, 7th Edition, CRC Press (Taylor and. Francis group), Boca Raton, FL, USA.

Useful Web Resources: <http://www.cdc.gov>; <http://www.fda.gov>

COURSE LEARNING OUTCOMES

Number	Outcomes	Corresponding Program outcomes
Knowledge and Skills		
LO1	Understand the principles of microorganisms during various food-processing and preservation steps	PLO1
LO2	Isolation, identification, and enumeration of the most common microorganisms found in specific food products.	PLO1
LO3	Recognize specific types of microbial spoilage during various food shelf life stages.	PLO3
LO4	Analyze different foods for presence of hazardous microorganisms using traditional and modern food microbiology technology	PLO3
LO5	Describe the situations where improper food handling and storage may lead to the spoilage or contamination of food.	PLO4
LO6	Identify desirable microorganisms and their effects in preservation and fermentation	PLO5

STUDENT LEARNING OUTCOMES MATRIX*

Number	Learning Outcomes	Learning Method*	Assessment Method**
--------	-------------------	------------------	---------------------

LO1	Understand the principles of microorganisms during various food-processing and preservation steps	Lecture	Exam/quizzes/Reports
LO2	Isolation, identification, and enumeration of the most common microorganisms found in specific food products.	Lecture	Exam/quizzes/Reports
LO3	Recognize specific types of microbial spoilage during various food shelf life stages.	Lecture	Exam/quizzes/Reports
LO4	Analyze different foods for presence of hazardous microorganisms using traditional and modern food microbiology technology	Lecture	Exam/quizzes/Reports
LO5	Describe the situations where improper food handling and storage may lead to the spoilage or contamination of food.	Lecture	Exam/quizzes/Reports
LO6	Identify desirable microorganisms and their effects in preservation and fermentation	Lecture	Exam/quizzes/Reports

ACADEMIC SUPPORT

The Hashemite University policy is to provide educational opportunities that ensure fair, appropriate and reasonable accommodation to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their Instructor to ensure that their individual needs are met. The University through its Special Need section will exert all efforts to accommodate for individual's needs.

Special Needs Section:

Tel:

Location:

Email:

COURSE REGULATIONS

Participation

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance.* It is a student's responsibility to monitor the frequency of their own absences.

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

Plagiarism

Plagiarism is considered a serious academic offence and can result in your work losing marks or being failed. HU expects its students to adopt and abide by the highest standards of conduct in their interaction with their professors, peers, and the wider University community. As such, a student is expected not to engage in behaviours that compromise his/her own integrity as well as that of the Hashemite University.

Plagiarism includes the following examples and it applies to all student assignments or submitted work:

- **Use of the work, ideas, images or words of someone else without his/her permission or reference to them.**
- **Use of someone else's wording, name, phrase, sentence, paragraph or essay without using quotation marks.**
- **Misrepresentation of the sources that were used.**

The instructor has the right to fail the coursework or deduct marks where plagiarism is detected

Late or Missed Assignments

In all cases of assessment, students who fails to attend an exam, class project or deliver a presentation on the scheduled date without prior permission, and/or are unable to provide a medical note, will automatically receive a fail grade for this part of the assessment.

- Submitting a term paper on time is a key part of the assessment process. Students who fail to submit their work by the deadline specified will automatically receive a 10% penalty. Assignments handed in more than 24 hours late will receive a further 10% penalty. Each subsequent 24 hours will result in a further 10% penalty.
- In cases where a student misses an assessment on account of a medical reason or with prior permission; in line with University regulations an incomplete grade for the specific assessment will be awarded and an alternative assessment or extension can be arranged.

Student Complaints Policy

Students at The Hashemite University have the right to pursue complaints related to faculty, staff, and other students. The nature of the complaints may be either academic or non-academic. For more information about the policy and processes related to this policy, you may refer to the students' handbook.

COURSE ASSESSMENT

Course Calendar and Assessment

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

Assessment	Grade Weighting	Deadline Assessment
Exam 1	30%	10/04/2022
Exam 1	30%	15/05/2022
Final Exam (3)	40%	

Description of Exams

Test questions will predominately come from material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of a combination of multiple choice, short answer, match, true and false and/or descriptive questions.

Homework: Will be given for each chapter, while the chapter in progress you are supposed to work on them continuously and submit in next lecture when I finish the chapter.

You are also expected to work on in-chapter examples, self-tests and representative number of end of chapter problems. The answers of self-tests and end of chapter exercises are given at the end of the book.

Quizzes: Unannounced quizzes will be given during or/and at the end of each chapter based upon the previous lectures. It will enforce that you come prepared to the class.

No make-up exams, homework or quizzes will be given. Only documented absences will be considered as per HU guidelines.

Grades are not negotiable and are awarded according to the following criteria*:

Letter Grade	Description	Grade Points
A+	Excellent	4.00
A		3.75
A-		3.50
B+	Very Good	3.25
B		3.00
B-		2.75
C+	Good	2.50
C		2.25
C-		2.00

D+	Pass	1.75
D	Pass	1.50
F	Fail	0.00
I	Incomplete	-