Course Specifications

General Information

Course name	Practical food and water microbiolgy
Course number	BIOL3169
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	0
Credit hours (practical)	1
Course Prerequisites	

Course Objectives

1 - Safety in lab

2 - Students will know required tools and equipment for experiments

3 - Enabling students to prepare media for growth bacteria

4 - Providing students with skills required to examine the sample temperature and Packaging

5 - Applying food and water experiments to know pollution and resulted outputs

Intended Learning Outcomes

Knowledge and Understanding	* Requires skills for using tools and equipment
	* Identification of sample defects
	* Applying experiments without external contamination occurance
	* Risks of microbiology tests with regard to contamination of samples
	* Reading of results
Intellectual Skills	* Relation between the sample and required tests
	* Selection proper tools for each test
	* Risks resulted from food and water contamination
	* Ability for reading and analysis results
Professional Skills	* Proper using of the devices
	* Applying tests without any external contamination
	* Report writing for results
	* Ability to examine all experiment with regard to food and water samples
General Skill	* Know risks caused by eating contaminated food or drinking contaminated water
	* Identification ratio of contamination for food and water samples
	* Conducting experiments with professional responsability

Course Contents

1 - Safety in laboratory
2 - Examine sample containers
3 - Types of tools, equipment and media used in lab
4 - Microbial population count of bacteria
5 - Examine meat and poultry production
6 - Examine milk and dairy production
7 - Bacteriology examination of water
8 - Examination of fungi
9 - Methods of collection samples

Teaching and Learning Methods

1 - Theoretical explanation for experiments
2 - Conducting experiments practically
3 - Reading and analysis of results
4 - Report writing for experiments
5 - Discussion of results

Teaching and Learning Methods for the Disabled Students

1 - Preparing the lab with required equipment, tools and techniques proper to disabled students

Students Assessment

Assessment Method	TIME	MARKS
Mid term exam	1 hour	30
Attendance and reports	-	20
Final exam	1 hour	50

Books and References

Course note	Water and food microbiology note
Other References (Periodical, web sites, ... etc.)	Webs related to water and food microbiology tests