

## Planning and Quality Assurance Affairs

Form (A)

### Course Specifications

#### General Information

<b>Course name</b>	Practical Medical Bacteriology
<b>Course number</b>	BIOL2157
<b>Faculty</b>	
<b>Department</b>	
<b>Course type</b>	Major Needs
<b>Course level</b>	2
<b>Credit hours (theoretical)</b>	0
<b>Credit hours (practical)</b>	1
<b>Course Prerequisites</b>	

#### Course Objectives

1 - Safety in lab
2 - Enabling students to prepare media for growth pathogenic bacteria
3 - Capacity building of students to prepare experiments with aseptic technique
4 - Diagnosis different types of bacteria which causing disease to human
5 - Ability for reading and analysis results

#### Intended Learning Outcomes

<b>Knowledge and Understanding</b>	<ul style="list-style-type: none"> <li>* How students avoid risks and disease due to aseptic technique</li> <li>* Requires skills for using tools and equipment</li> <li>* Proper using of devices</li> <li>* Diagnosis different types of bacteria which causing disease to human</li> <li>* Ability to examine all experiment with regard to related samples</li> <li>* Report writing and results analysis</li> <li>* Ability to read and analyze results</li> </ul>
<b>Intellectual Skills</b>	<ul style="list-style-type: none"> <li>* Selection proper tests for each sample</li> <li>* Requires tools and equipment according to experiment</li> <li>* Estimating risks for experiment</li> </ul>
<b>Professional Skills</b>	<ul style="list-style-type: none"> <li>* Proper using of the devices</li> <li>* Avoiding risks of experiments in order to use aseptic technique</li> <li>* Diagnoses microbes about genus and speeches</li> </ul>
<b>General Skill</b>	<ul style="list-style-type: none"> <li>* Comparison between different results of samples</li> <li>* Creative thinking of presenting and explanation the results</li> </ul>

## Course Contents

- 1 - Safety in laboratory
- 2 - Method of identification bacteria by microscoping examination and biochemical reactions
- 3 - Staining of bacteria (Gram - stain)
- 4 - Biochemical reaction tests about enteric bacteria
- 5 - Biochemical reaction tests about urinary tract infection
- 6 - Biochemical reaction tests about respiratory tract infection
- 7 - Commercial kit systems (API) systems tests
- 8 - Microbial population count of bacteria

## 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

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

## Books and References

Course note	Medicad Diagnostic microbiology note
Other References (Periodical, web sites, .... etc.)	Webs related to Medicad Diagnostic microbiology tests