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## Course Specification

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Course Title	Microbiology	
Course Code	Asw.nur 112	
Academic Year	Frist year	
Coordinator	<b>2017-2018</b>	
Teaching Staff	Microbiology department staff	
Branch / Level	Frist year	
Semester	Second semester	
Pre-Requisite		
Course Delivery	<b>Lecture</b>	<b>30 h lectures</b>
	<b>Practical</b>	<b>-----practical</b>
Parent Department	Microbiology department	
Date of Approval		

### 1. Course Aims

#### The aims of this course are to:

Provide the nursing students with fundamental aspects of Microbiology and immunology, to familiarize students with the common infectious diseases and make students aware of the different nasocomial infections and the principles and measures of infection control policy.

### 2. Intended Learning outcomes (ILOs)

#### A. Knowledge and understanding:

##### By the end of this course students should be able to:

- A1. Recognize key terms of microbiology & immunology.
- A2. Describe the important causative agents of infection.
- A3. Mention methods for collecting different clinical specimens from different body systems.
- A4. List principles of immunization against different infectious diseases.
- A5. List types of vaccines.
- A6. Explain the basics of antimicrobial chemotherapy.
- A7. Recall the complication of antimicrobial chemotherapy.

A8. Explain principles of infection control policies.

***B. Intellectual skills:***

**By the end of this course, the students should be able to:**

B1. Compare between disinfection and sterilization.

B2. Differentiate between physical and chemical methods of sterilization.

B3. Illustrate chain of infection.

***C. Professional and practical skills:***

**By the end of this course, the students should be able to:**

C1. Collect different specimens accurately.

C2. Practice the basic infection control measures as hand wash.

C3. Apply the different methods of sterilization and disinfection

***D. General and transferable skills:***

**By the end of this course, the students should be able to:**

D1. Collaborate with his colleagues in a team work, as well as solving problems.

D2. Behave ethically with his teachers, colleagues as well as other personnel in the field.

D3. Establish life-long self-learning required for continuous professional development to remain in current with advances in knowledge and practice.

D4. Present information clearly in written, electronic and oral forms.

D5. Aware and capable of evaluating the risk of disseminating infections in the hospital and community through other cases, carriers or even healthcare workers during manipulating and

handling infectious material

### 3. Course Contents

<b>Week</b>	<b>Topics</b>
1 <sup>st</sup> week	Introduction to Microbiology, Bacterial Cell Structure.
2 <sup>nd</sup> week	Bacterial Physiology, Metabolism, Reproduction And Growth Curve.
3 <sup>rd</sup> week	Basic Bacterial genetics.
4 <sup>th</sup> week	Antimicrobial chemotherapy.
5 <sup>th</sup> week	Disinfection and Sterilization.
6 <sup>th</sup> week	Collection of clinical samples.
7 <sup>th</sup> week	G+ve & G-vecocci (Staphylococci , streptococci, and Neisseria).
8 <sup>th</sup> week	G+ve bacilli (Diphtheria,Clostridium)
9 <sup>th</sup> week	Mycobacteria.
10 <sup>th</sup> week	Gram-ve bacilli (Coliform, Salmonella).
11 <sup>th</sup> week	Gram-ve bacilli (Shigella, Vibrio, Proteus Pseudomonas, Spirochates).
12 <sup>th</sup> week	General virology
13 <sup>th</sup> week	Herpes v,measles v and mumpes v

### 4. Teaching and Learning Methods

Modified lectures.

Practical lab.

### 5. Student Assessment

<b>Assessment Method</b>	<b>Assessment Length</b>	<b>Schedule</b>	<b>Proportion</b>
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<b>Written Examination</b>		15 <sup>th</sup> week	80%
<b>Oral Assessment</b>		15 <sup>th</sup> week	20%

## 6. List of references

*Course notes:*

*Essential Books:*

**Sullivam & Gary P(2013):** Human pathogenic Fungi: Melecular Biologyband Pathogenic Mechanisim (3th ed), Newyork, Elsevier.

*Web sites:*

asmnews@asmusa.org

2-[http://www.microbe.org/microbes/virus\\_or\\_bacterium.asp](http://www.microbe.org/microbes/virus_or_bacterium.asp)

3-<http://www.microbelibrary.org>

4-<http://www.mic.ki.se/Diseases/c2.html>

5-<http://www.med.sc.edu:85/book/welcome.htm>

## 7. Facilities required for teaching and learning

	<b>Course Coordinator</b>	<b>Head of Department</b>
Name	Prof.	Prof.
Name (Arabic)	أ. د.	أ. د. محمد نجاتي
Signature		
Date	/ /2010	/ /2010