

**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation &  
Assessment**

**Course Specifications  
(CS)**

## Course Specifications

Institution	Dammam University	Date
19/5/2014		
College/Department	Biology	

### A. Course Identification and General Information

1. Course title and code: Microscopic Preparations :Biol
2. Credit hours 2 hours
3. Program(s) in which the course is offered. Biol 201 (If general elective available in many programs indicate this rather than list programs) <b>Bachelor of Science in Biology</b>
4. Name of faculty member responsible for the course <b>A specific team from the Biology Department</b>
5. Level/year at which this course is offered : 4 <sup>th</sup> Level &2 <sup>nd</sup> Year
6. Pre-requisites for this course (if any)
7. Co-requisites for this course (if any)
8. Location if not on main campus ---

9. Mode of Instruction (mark all that apply)

- |                                     |                  |
|-------------------------------------|------------------|
| a. traditional classroom            | What percentage? |
| b. blended (traditional and online) | What percentage? |
| c. e-learning                       | What percentage? |
| d. correspondence                   | What percentage? |
| f. other                            | What percentage? |

Comments:

B Objectives

1. What is the main purpose for this course?

-This course is one of the main fundamental courses of biology. The student will be involved with tools and Instruments used in microtechniques.

- The student will be able to differentiate the chemical reagents such as fixatives and Stains

-The student will learn how to make smears and Squashes.

-The student will acquire skills to prepare of Microscopic sections using paraffin, Gelatin and Celudin

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

-It is necessary to increase the time of lecture per week from one to two hours.

-We have to change the content as a result of new research in this field

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

### 1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Tools and Instruments	1	2
Narcotization and Fixation	2	2
Types of Fixatives	3	2
Biological and natural stains	4	2
Synthetic stains	5	2

Staining of Living Cells	6	2
Staining with Hematoxylin&Eosin	7	2
Smears and Squashes	8	2
Mounting media	9	2
The Whole Mounts	10	2
Preparation of Microscopic sections using paraffin	11	2
Preparation of Microscopic sections using Gelatin	12	2
Preparation of Microscopic sections usingCelloidin	13	2
Revision	14	2

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory or Studio	Practical	Other:	Total
Contact Hours	1			2		3
Credit	1			1		2

3. Additional private study/learning hours expected for students per week.

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Co de #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	The student will be able to diagnose the microtechniques	Power point	Periodic Exams
1.2	The student will be able touse different techniques		
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	The student will be able to collect information	Essay	
2.2	The student would be able to compare and contrast the information		
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	The student will be able to collect and analysis	Analysis	
3.2		presentation	
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	The student will be able to communicate with the source of information	Free Writing	
4.2	The student will be able to deal with the information technology and computer	Reflection Writing	

<b>5.0</b>	<b>Psychomotor</b>		
5.1	Activate the mental activity	Questions and discussion	
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)							
	1.1	1.2		2.1		3.2		4.1
<b>1.1</b>								
<b>2.1</b>								

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Essay	7 <sup>th</sup>	10%
2	Theoretical Mid Term Exam	8 <sup>th</sup>	20%
3	Practical Mid Term Exam	7 <sup>th</sup>	10%
4	Practical Final Term Exam	14 <sup>th</sup>	20%
5	Theoretical Final Exam	15 <sup>th</sup>	40%
6			

7			
8			

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Every teaching staff are available four hours per week for individual student consultations and academic advice in addition one hour weekly for teaching

#### E Learning Resources

1. List Required Textbooks

Micro Techniques Editor :(El Banhawy and Ganzoury)

Publisher: Dar El Maharef

2. List Essential References Materials (Journals, Reports, etc.)

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

Black board



5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

Bitplane , Imaris

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

We need junior staff

2. Computing resources (AV, data show, Smart Board, software, etc.)

Data show is available

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

Cytometer

#### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching  
-Action plans for the next academic year

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

There is a strategy for evaluating the teaching process applied in DammanUniversity  
-External evaluation

3 Processes for Improvement of Teaching

Forming examination committee for reviewing exams  
Determine the role of External evaluator

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

Practical exams  
Written exams  
Oral exams

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

Discussion

Periodic Exams