

Course Specification

A- Basic Information

Programme(s) on which the course is given:	MSc of Cytology, Histology and Histochemistry
Department responsible for offering the course:	Zoology
Department responsible for teaching the course:	Zoology
Academic year:	2012-2013
Course title and code:	Advanced Microtechnique Z625
Contact hours (credit hours):	Lecture: 2 hrs Practical: 2hrs Total: 3 hrs
Course coordinator:	Prof. Hoda Abd-El-Hafez Mahran

B- Professional Information

The course aim and intended learning outcomes are based on that mentioned in the programme specifications, with more course-related specific details.

1- Overall Aims of Course: By the end of this course, the student should be able to

- * Improve the skills needed to prepare biological specimens for light microscope.

2- Intended Learning Outcomes of Course (ILOs):

a- Knowledge and Understanding:

- a1: Memorize the steps of preparing specimens for light microscope.
- a2: Identify types of preparations , fixatives, fixation, unstained preparations, paraffin method, sectioning , affixation, stains .
- a3: Outline the specialized staining protocols of different tissue structures.

b- Intellectual Skills:

- b1: Analyze the points of strength and weakness in each slide.

c- Professional and Practical Skills:

- c1- Set a program to prepare the biological specimens for light microscope.
- c2- Practice the times for each step of tissue preparation .

d- General and Transferable Skills:

- d1: develop skills in reading and researching.

d2:Develop team work skills

d3:Use different sources of information .

3- Course Contents

Topic	No. of hours	Tutorial/ Practical	Lecture
1-types of preparations	2	1	1
2- fixatives	1	1	1
3-fixation	1	1	1
4-unstained preparations	2	1	1
5-paraffin method	1	1	1
6-sectioning	1	1	1
7-affixation	1	1	1
8-stains & staining	2	1	1
9-spicialized staining of different component	2	1	1

4- Teaching and Learning Methods

- Lectures.
- Practical sessions.
- Writing essays.
- Oral presentation.

5- Student Assessment Methods

- Essays
- Oral exms
- Written exams.
- Practical exams.
- Quizzes.

Assessment schedule

Assessment 1	Essay	Week 1 essay/term
Assessment 2	Oral exam	Twice/term
Assessment 3	Mid-term exams	Week 7
Assessment 4	Semester Work Exam	Week 10
Assessment 5	Final term exam	Week 14

Weighting of assessments

Mid-term examination	20%
Final-term examination	40%
Oral examination	10%
Practical examination	20%
Semester work	10%
<hr/>	
Total	100%

6- List of references**1. Course Notes**

- 1- Internet and library material.
- 2- Handouts given separately during the course span.

2. Essential Books (Text books):

1. Carleton s histological technique.

3. Recommended Books

1. Histological techniques.

4. Periodicals, web sites,...,etc

1. Journal of Histology and Histochemistry.

7- Facilities required for teaching and learning

- * Dark room equipped with overhead and LCD projector.
- *ultramicrotome
- * oven, incubator, different staining solutions (gimsa, lishman , haematoxyline and eosine)

Course coordinator: Prof. Hoda Abd-El-Hafez Mahran

Head of Department: Prof. Saber Sakr