

A- Basic Information

Programme(s) on which the course is given:	MSc of Fish Biology and Aquatic Ecology
Department responsible for offering the course:	Zoology
Department responsible for teaching the course:	Zoology
Academic year:	2012-2013
Course title and code:	Protozoology Z631
Contact hours (credit hours):	Lecture:2 hrs Practical:2 hrs Total: 3 hrs
Course coordinator:	Prof. Dr. Mansour Galal

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

- * Identify the new taxa of the living organisms, particularly Protista.
- * Demonstrate and describe the basic biology and ultrastructure of free living protozoa.
- * Compare the different types of life cycles of parasitic protozoa.

2- Intended Learning Outcomes of Course (ILOs):

a- Knowledge and Understanding:

- a1- Describe the various free-living protozoa and subgroups.
- a2- Illustrate the role performed by free-living protozoa to minimize pollution in both natural field and man-made environments.
- a3- Define parasitic protozoa as causative agents in certain diseases and zoonosis.

b- Intellectual Skills:

- b1- Discriminate between different types of protozoa using different types of identification keys.
- b2- Discuss zoonosis and differentiate zoonotic diseases.

c- Professional and Practical Skills:

- c1- Collect and preserve the various types of protozoan organisms.
- c2- Use various staining techniques of protozoa.
- c3- Design lab experiments to follow up protozoan succession.

d- General and Transferable Skills:

- d1- Locate internet programmes and on-line data to show various protozoan aspects.
- d2- Improve writing structural reports or essay and oral communication abilities.
- d3- Present reports in seminars and other group meeting.
- d4- Find effective and realistic solutions for work problems via analysis and good expectations.

Course Contents

Topic	No. of hours	Tutorial/ Practical	Lecture
Protozoan taxonomy difficulties and evolution.	4	2	1x2 hr
Various protozoan habitats.	4		2x2
Free living protozoa.	4		2x2
Protozoan biology.	6	2	2x2
Protozoan and pollution.	8	4	2x2
Protozoan relationships.	4		2x2
Parasitic protozoology and life cycles.	6	2	2x2

3- Teaching and Learning Methods

- Lectures.
- Research assignment.
- Lab demonstration.
- Oral presentation.

4- Student Assessment Methods

- Written Exams.

- Interviews.
- Oral Presentations.
- Reports

Assessment schedule

Assessment 1	Reports	One every three weeks
Assessment 2	Mid-term exams	Week 7
Assessment 3	Semester Work Oral Exam	Biweekly
Assessment 4	Final term exam	Week 14

Weighting of assessments

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

6- List of references

1. Course Notes

- Related web sites

2. Recommended books

- **Free-living protozoa.**
- **Protozoa and other protista.**
- **Parasitic protozoa.**

7- Facilities required for teaching and learning

- * Data show.
- * Slide and over-head projector.
- * Librarian facilities.
- * Computers with internet Access.

Course coordinator: Prof. Mansour Galal

Head of Department: Prof. Saber Sakr

