

**DEPARTMENT OF BIOLOGICAL SCIENCES
COLLEGE OF SCIENCE AND ENGINEERING
LANDMARK UNIVERSITY**

2014/2015 SESSION

MCB313 (INTRODUCTORY MYCOLOGY)/3 UNITS

Course code: MCB313

Units: 3

Course Title: Introductory Mycology

Course Lecturer: Dr. Osemwegie, O.O and Dr. Oyebanji, O.A.

Semester: Alpha Semester; 2014/2015 SESSION.

Time of Lecture: Prescribed by the Examination and Time-table Committee, LMU (2hrs of weekly lecture and one practical session).

Location: Prescribed by the Examination and Time-table Committee, LMU.

A. Brief Overview

Introductory mycology introduces the students to union fungi with emphases on their adaptive characteristics e.g. nutritional, reproductive, metabolic and ecologic lifestyle. It also espouses human attraction to them in terms of economic benefits even to the environment and their demerits. Business opportunities involving fungi would equally be taught to students. The current debate on the classification of fungi, historical bases for reclassification and divergence of fungal taxa across kingdoms of living organisms should be discussed. Reproductive cycles would be compared for evidence of evolutionary diversity and adaptive variations.

B. Course Objectives/Goals

- (i) Impact sound understanding of mycology.
- (ii) Provoke vivid interest in mycological based enterprises and career path among students.
- (iii) Task students on the taxonomic controversies and interest in geomycology by exploring their ecological relevance of fungi.
- (iv) Expose students to common fungi in their environment and methods for isolating, culturing and identifying them.
- (v) Impart knowledge of fungi characteristics

- (vi) Improve their knowledge of experimentations using fungi as tools.

C. Method of Lecture Delivery/Teaching Aids

Integrated lecture technique which combines power-point presentations, interactive class session, end of session-spanned projects, debate, note provision etc. is adopted. The students would also be put through qualitative assessment and scored over 10marks thrice in the Semester.

D. Course Outlines

(a) Module 1:

Dr. Osemwegie, O.O. (Week 1 – Week 6)

Week 1: Definition of mycology and fungi, Historical evolution of the subject of mycology. Assignment 1.

Week 2: General characteristics of fungi, Associations, Economic importance and Classification of fungi.

Week 3: Characteristics, representative genera, classification and life cycle of false or pseudofungal taxa e.g. Myxomycota or slime molds.

(b) Module 2:

Week 4: General characteristics, representative genera, classification and life cycle of each group of the Mastigomycota i.e. Oomycetes, Chytridiomycetes, Plasmodiophoromycetes etc.

Week 5: Continuation of week 4 content (Assignment 2)

Week 6: Continuation of week 4 content

Dr. Oyebanji, O.A.

Week 7: General characteristics, representative members, classification and life cycle of Amastigomycota (true Fungi) i.e. Zygomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes.

Week 9-10: Continuation of week 7 content.

E. Tutorials

To be provided on students' request.

F. Structure of Programme/Method of Grading

There shall be two tests administered to students at 10% score each, the cumulative scores on assignments shall constitute 10%.

The examination shall compose multiple choice questions and short-answer theory questions of 70% total score. Total score at the end of the alpha semester shall be 100%.

G. Ground Rules and Regulations

(i). 75% class attendance and participation is required from students to be eligible for MCB313 examination.

(ii). No student shall be allowed into lecture after 20 minutes from the time of entrance of the course teacher.

(iv). Any immodestly dressed student and/or students that failed/refused to participate class question and answer exercises shall be summarily referred for counselling.

(v). Assignment that was not submitted and delivered to the course teacher within stipulated time frame shall not be graded.

(vi). Students are required to upgrade knowledge gained in class through extra reading for better examination grade.

H. Topics for Term Paper/Assignment

Topics for discussion will be generated by the course teacher.

I. Alignment with Goals and Vision of Landmark University

The course content and ground rules connect with the core values of responsibility, possibility mentality, capacity building and diligence.

J. Contemporary Issues/Industrial Relevance

(i). This course combines history, lifestyles, gainful enterprise opportunities and conceptualised ecology of fungi. It also provides sound understanding of fungal taxonomy and relevance to human existence.

K. Recommended Reading

Introductory mycology by Alexopoulos, C.J and Mims, C.W., 21st Century guidebook to fungi by David Moore, Geoffrey, D. Robinson and Anthony, P.J. Trinci., The Fungi by Michael, J. Carlile, Watkinson, C. Sarah and Graham, W. Gooday., Introduction to fungi by John Webster and Roland, W.S. Weber (any other mycology book will suffice)

