

# **BOT 111 INTROCUCTION TO BOTANY**

## **FIRST SEMESTER 2018/2019 SESSION**

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**MICROBIOLOGY LAB**

**Department of Biological Sciences**

### **PHILOSOPHY OF TEACHING**

The primary focus of the lecture sessions is to achieve effective teaching and learning and provide background information and practical oriented training for biology, microbiology and biochemistry majors. All major learning modes: visual (books, slides, and live specimens), auditory (lectures and class interactions), and manipulative (“hand on” exercises) would be utilized in the process. The active learning methods that would be employed are group discussion, brainstorming, presentation by students, report of practical activities, and interaction with facilitators during feedback presentation.

## **SYLLABUS**

**INTRODUCTION TO BOTANY 2 CREDIT HOURS** : Diversity of living organisms and habits, life form mode of nutrition, size, shape, etc, Common features of organisms. General characteristics, similarities, differences, distribution and economic importance of viruses, bacteria, fungi, lower green and vascular plants. Ecological adaptation of various plant forms, introduction to Ethnobotany and herbal medicine. Laboratory and lecture are integrated with two hours of lecture and three hours of laboratory per week.

**DATE   LECTURE TOPIC**

**LAB TOPIC**

**October**

11 TH Introduction/General course Information

18 TH Viruses: Nature and origin, structure,  
replication & classes of viruses

22 M Economic importance of viruses

Use of the microscope

25 TH Bacteria: Morphology, classification  
& Economic importance

**QUIZ**

**November**

1 TH Eukaryotic plant cell  
Plant cell and organelles

5 M 1 structure & function

Plant cells & organelles

8 TH Cell organelles

**LAB CHECK #1**

15 TH Fungi, classification  
& Economic importance of fungi

Fungal isolation and culture

22 TH **1ST CONTINUOUS ASSESSMENT TEST**

26 M Algae: Morphology and classification

Observation of freshwater algae

29 TH Economic importance/ecological role of algae

**QUIZ**

**December**

6 TH Bryophytes: Morphology and classification

Bryophytes

13 TH Ecological role of Bryophytes  
& Economic importance

## QUIZ

## LAB EXAM I

### December

7 TH Pteridophytes: General characteristics

10 M **LAB CHECK #2**

Pteridophytes

13 TH Division Psilophyta

Division Lycopodiophyta

19 W **CHRISTMAS BREAK FOR STAFF**

20 TH Division Equisetophyta

Division Polypodiophyta

Economic importance of Pteridophytes

### CLASS ACTIVITY

### Discussion on ecological role of plants

### January

4 TH Spermatophyta: General characteristics

Gymnosperms - Division Cycadophyta

7 M Division Pinophyta

Gymnosperm

11 TH Division Ginkgophyta

Division Gnetophyta

17 TH Angiosperms

23 TH Angiosperms Ethnobotany and medicinal plants

### REVISION WEEK

### INTERNET PROJECT DUE

### February

### FINAL EXAMINATIONS

**Additional course information:** Students are encouraged to read the book before coming to class. Review what pages will be discussed in lecture by looking at the pictures, figures, and illustrations. Read the chapter summary and then move on to reading the text to be acquainted with the learning material. After lecture and lab, you should review your notes and try the practice exams that are available at the Departmental Library.

**Textbook:** Anoliefo, G.O. (2004). Introductory Tropical Plant Biology. Uniben Press.

- Lab Manual:** Usually provided at the departmental office.
- Lab tools:** Attendance is compulsory and with the lab manual. Supplies may include drawing paper (blank white paper), lead and color pencils, ruler, eraser, compass, and a dissecting kit (NO SCALPELS).
- Attendance:** Students are expected to attend all classes. Only student who attain minimum of 70% attendance will be eligible to sit for the final exam
- Grading:** **Grading:** Final Exam consist 70%. Tests, quizzes and Laboratory report will constitute Continuous Assessment of 30%. Letter grades are given depending on the scale of the results
- Exam material:** Lecture, lab, and the final exams will consist mostly of multiple-choice, matching, true-false, short answer, and short essay questions. All exams count in determining the final grade. For best performance, read the assigned text before attending lecture and review lecture notes after each class. Make-up lectures will be given only in extenuating circumstances. There will be no make-up lab exams. Should you miss a lab exam, you will receive a zero for the assessment.
- Cheating:** All work should be that of the student alone. If it is determined by the instructor that a student has cheated on an exam or any assignment, the student will receive no credit for that exam or assignment and the student's name will be reported to the proper authorities.