

**Ohio University, Athens campus,
P BIO 210 A01, Plant Physiology, call number 05302, Credit hours 4
Winter 2008**

Instructor: Dr. Ahmed Faik
Email: faik@ohio.edu
Office Hours: by appointment

Office: 512 Porter Hall
Phone: 593-1121

Lecture: Monday, Tuesday, Thursday, 10:10-11:00 am, Porter Hall 304
Lab: Thursday 1:00-3:00 pm, Porter Hall 304
Textbook: -*Biology of Plants*, Raven, Evert & Eichhorn. 7th edition. (ISBN 0-7167-1007-2) W.H. Freeman Publ.
-Handouts during the class, and as ppt at <http://oak.cats.ohiou.edu/~faik/uploads>
Optional Text: Introduction to Plant Physiology, third edition, by Hopkins & Huner. Wiley Publ.
Lab Manual: Handout during the first lab meeting

Course Format:

The course has two components: 3x1h lectures/Discussion and 1x2h lab. The lectures and the labs are integrated and will cover the basics of physiological processes at the cellular and molecular level. This course is designated to be "writing enriched" and will approximately cover the following chapters in the textbook:

A-Physiology of the metabolism

Part-I: Carbon metabolism:

Chapter 7: Photosynthesis, Light, and Life

Chapter 6 & 5: Respiration and flow of energy

Exam1 (Tentative date: January, Tuesday 29th)

Part-II: Mineral metabolism:

Chapter 29: Plant nutrition and soils

Chapter 30 & 4: Movement of water, solutes, and substances in cells and plants

Exam2 (Tentative date: February, Tuesday 19th)

B-Physiology of the growth and development

Part-I: Environmental factors that regulate plant growth:

Chapter 28: External factors and plant growth

Part-II: Internal factors that regulate plant growth:

Chapter 27: Plant hormones Internal factors and plant development:

Chapter 3 (pages 52-58): cell wall

Exam3 (March, Monday 17th at 8am)

They will be seven (7) lab exercises and you will be working in pairs, but each student is expected to write a lab report for each of these labs. Each lab report is worth 20pts + 10pts for lab work (total of 30pts per lab report).

Grading:

Your final grade will be determined by adding points as follows:

Exam 1	95 pts	Lab reports	154 pts
Exam 2	95 pts	Work in the lab	56 pts
Exam 3	100 pts		
Total	290 pts		210 pts

Grade assignments:

A-, A, A+	450 -500 pts (90-100%)
B-, B, B+	400 -449 pts (80-89%)
C-, C, C+	350 -399 pts (70-79%)
D-, D, D+	300 -349 pts (60-69%)

Policies on Attendance:

Lab attendance is mandatory, and attendance at lecture is strongly encouraged. You will be allowed to miss two lectures without legitimate excuses. Any absence after these two missed classes will be reflected on your grades (-5% per lecture). Missed work will not be excused without adequate proof of legitimate absence as per University policy.

Academic dishonesty:

Any evidence of cheating in lecture or lab, including falsification or misrepresentation of data or plagiarism will result in failure of the course.