AG 230 - Fertilizers and Soil Fertility

Spring Semester 2013

Monday & Wednesday - 16:00 – 20:15

Instructor: Steve Burch

Phone: (760) 427-8467
      email: waterdoctor.sb@gmail.com

Class Code: 20288

Text Books Required

<u>**Soil Fertility and Fertilizers – An Introduction to Nutrient Management**</u> (7th Ed),
Havlin, Tisdale, Beaton, Nelson

<u>**Western Fertilizer Handbook**</u> (9th Ed), California Plant Health Association

Class Objectives

This course covers the nature of fertilizers and soil amendments, their properties, methods of application, and reaction upon soils and plants. The composition, value, and use of fertilizer materials and soil correctives will be discussed. Additionally, the methods employed in the manufacture, distribution, and application of fertilizers are described.

Student Learned Outcomes

At the end of this class, the student will be able to: 1) Plan out and defend a schedule for fertilization of a given crop over the life cycle based on cropping system soil type, stage of growth, and season of growth; 2) Discuss fertilization systems and design as it influences plant nutrient uptake and utilization; and 3) Discuss various fertilization systems and benefits/compromises of each system based on a given crop system, soil type, and geographic location.

Attendance and Class Policies

Regular attendance in all classes is expected of all students enrolled. Instructors are required to include a student's attendance record in computing grades. A student may be excluded from further attendance in a class during a semester when absences, after close of registration, have exceeded the number of units for the class.

You should come to class prepared to be an active participant in the learning process. Enhanced learning occurs through interaction with others.

It is your responsibility to make an appointment with the instructor if you have concerns about your progress in the class.

It is your responsibility to complete a DROP REQUEST if you are withdrawing from the class.

You are considered TARDY if you arrive in class after roll has been called. Three (3) tardies constitute one (1) absence. A tardy is valued at -1 point, and an absence is valued at -3 points.

Assignments

Group Research Project: You will be required to work in a group on one class presentation. I will provide class time to do group work. However if you feel your group needs more time then you will need to make arrangements with your group to work outside of class. The research project will identify a topic of agriculture, as it relates to the class content, and relevant scientific information that is applicable. The student will then use the information to develop an informed position that will then be presented in the form of an oral presentation, with citations.

Notebook: Each student is required to keep a class notebook which will include all lecture notes, handouts, and other assignments which may be assigned. Points will be awarded for completeness and neatness.

Notice

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. DSP&S, Room 2117, Health Science Building (760) 355-6312.

Exams and Quizzes

Exams and quizzes consist of 5 quizzes (at 20 points each) and 2 exams (mid-term and final) valued at 100 points each. There will be no make-up quizzes.

Grading

Attendance   50
Notebook   50
Exams and Quizzes   300
Research Project (SLO)   100

A = 500 - 450
B = 449 - 400
C = 399 - 350
D = 349 - 300
F = 299 or less

I _do not_ grade on a curve.

Weekly Course Outline (Schedule subject to change at instructor's discretion)

March 25 – Chaps 1 & 2

Apr 1 – ***Spring Break***

Apr 8 – Chaps 3 & 4 - **Quiz 1** (chaps 1 & 2 – 20 pts.)

Apr 15 – Chaps 5 & 6 - **Quiz 2** (chaps 3 & 4 – 20 pts.)

Apr 17 – **MIDTERM (chaps 1 through 5)** – Lecture Chaps 6 & 7

Apr 22 – Chaps 8 & 9 - **Quiz 3** (chaps 6 & 7)

Apr 29 – Chaps 10 & 11 - **Quiz 4** (chaps 8 & 9)

May 6 – **Quiz 5** (chaps 10 & 11) – Research Project Presentations

May 8 – Research Project Presentations – ***Final***