

IMPERIAL VALLEY COLLEGE
COURSE SYLLABUS
FALL 2012
DR. BALDEV SINGH

Division:	Science, Math & Engineering	Course Number:	AG 140
Course Title:	Principles of Plant Science	Credit Units:	4
Lecture Hours:	3	Class Date:	T,R
Building:	New Building 2732		
CRN:	10054	6:30 pm-9:40 pm Lec/Dis (T)	
		6:30 pm-9:40 pm Lab (R)	

Course description:

This course provides a working knowledge of the fundamental structures and processes of plants. Covers structure and function of plants, physiology, principles and practices of crop improvement, propagation, production, processing, storage, and marketing. Production, Harvest, and utilization of principle crops grown in California and the Imperial Valley will be include student participation in planting, monitoring, irrigation and harvesting plants. Students will be introduced to research as it applies to the crop industry.

Measurable course objective and minimum standard for grade of C:

Student will:

- Identify soils as a natural resource that must be managed and preserved;
- Identify and describe methods of irrigation that are best suited to application crops;
- Understand macro and micro plant nutrients and the related nutrient cycle;
- Describe biological temperature ranges, climate classifications, growing degree days and temperature stress;
- Understand the role that light plays in plant growth and energy storage;
- Describe biological interactions including weeds, growth regulators, disease, pests, and integrated pest management (IPM);
- Understand photosynthesis plant photosystem, transition of light energy to chemical energy; and the Carbon Cycle;
- Understand regional differences affecting plant species compatibility, basic genetics, hybrid superiority, measurement of plant growth and applied knowledge;
- Understand germination, roots and their development, shoot growth and factors affecting plant growth;
- Understand plant propagation including sexual and asexual processes;
- Understand biotechnology advancements including genetic engineering, transgenic plants and related policy;
- Learn to read, understand, interpret, apply the information contained in research reports;
- Identify major agronomic, vegetable, grain, forage, legume & fruit crop species important to the United states in general and the Imperial Valley in particular;
- Investigate careers in plant science and horticulture.

Required material:

Introduction to Plant Science, By Rich Parker. Thompson Delmar Learning-publisher

Instructor's information:

Email: baldev.singh@imperial.edu

Attendance policy:

1. Class attendance and tardy policy follows the regulations in the IVC catalog.
2. Student may be automatically dropped after a total of 7 hours of absence from the lecture and/or laboratory unless a written petition to justify absences is approved by the instructor. A repeat of the above will result in permanent removal from the roll. We are required by federal regulations to report drops to the veteran and financial aid official.
3. It is your responsibility to drop before any deadline.
4. It is your responsibility to obtain notes and work assignments from a classmate and study them to understand. If class notes and text do not provide sufficient explanation, please call to see the instructor during office hours or make an appointment.
5. You should come to class prepared to be an active participant in the learning process. Enhanced learning occurs through interaction with others.
6. It is your responsibility to make an appoint with the instructor if you have concerns about your progress in the class.
7. It is your responsibility to complete a DROP REQUEST if you are withdrawing from the class.
8. Absence from any class will result in deduction of 5 points

Other school policies:

1. No food or beverage allowed in classroom.
2. No children allowed in classroom.
3. All the electronic devices need to be turned off or in the quiet mode.
4. 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 grading procedures:

1. Approximately 13 lab reports (lab reviews) each worth 10 points due the following week of lab. 5 Points will be deducted if turned in late. No report will be accepted after that. (130 possible points). Final Lab Exam will be worth 50 points.
2. There will be 4 written examinations each worth 100 points. No make ups. (Total 400 points)
3. Final Exam will be accumulative and comprehensive. (Total 120 points)
4. Assignments turned in late will not be accepted, they can, however, should be turned in early.
5. Each student will be required to keep a class notebook which will include all lecture and handouts. Points will be awarded for completeness and neatness.

Total Possible Points: 700

Grading scale: A: Above 90%
 B: 80-89%
 C: 70-79%
 D: 60-69%
 F: below 60%

Interaction with instructor and other students is an integral part of the learning part of the learning. However, you must personally complete the assignments. All work submitted for grading must be your own.