Reedley College Ag & NR Department

Timothy E. Smith / Savanah Sanchez Plant Science 1L

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**Plant Science 1L: Introduction to Plant Science Laboratory**

**Course Information**

**Catalog Description**

The purpose of this course is to reinforce the principles and practices of plant science introduced during the Introduction to Plant Science lecture. Topics include cell and plant structures, reproduction, and physiology, as they relate to management of crops for food, fiber, shelter, and recreation. On completion of the course, the student will be: (1) able to understand the importance of plants to society, animals, and the environment, (2) identify plant organs, tissues, and life cycles, (3) comprehend the practical aspects of photosynthesis and the management schemes to maximize photosynthesis, (4) familiar with the relationships of plants with other organisms such as insects, diseases, and beneficial species. Laboratory exercises will cover plant anatomy, physiology, identification, and propagation.

**Textbooks**

***Plant Science 1L: Introduction to Plant Science Laboratory Manual.*** Reedley College Bookstore.

Mauseth, J.D. 2019 ***Botany: An Introduction to Plant Biology*** 7th Ed. Jones & Bartlett Learning Burlington, Massachusetts.

**Student Learning Outcomes:**

1. locate and explain the functions of plant cells, tissues and organs.
2. select the optimal reproduction method and system for agricultural and horticultural plants.
3. explain the effects of specific techniques and materials on plant growth, development, photosynthesis, and reproduction.
4. relate the applications of water and nutritional elements to key growth processes of plants and microbial populations.

**Assignments**: All assignments are due at the beginning of class on the date due. Late submission of assignments will be assessed a penalty of 50%. No exceptions are made.

**Academic Dishonesty**: Plagiarism and cheating are serious offenses and may be punished by failure on exam, paper or project; failure in course; and or expulsion from the University. For more information refer to the "Academic Dishonesty" policy in the College Catalog.

**Assignments and Grading**

**Point Distribution**

**Laboratory/Exercise Title Points**

1 Microscope Exercise 10

2 Plant Cells 10

3 Plant Tissues 10

4 Seeds 10

5 Farm Laboratory Tour 10

6 Hydroponics Nutrient Study I 20

7 Roots and Seedlings 10

8 Stems and Twigs 10

9 Leaves 10

10 Flowers 10

11 Propagation 10

12 Fruits 10

13 Field Trip – Nursery/Winery 20

14 Nutrient Deficiency Study II 20

15 Farm Laboratory Exercise 20

16 Insect Dissection/Beekeeping 20

17 Farm Laboratory Exercise 10

Total 220

90% = A 80% = B 70% = C 60% = D Less = F

**Last Day To:** Last Day to Drop Class with Refund: August 21, 2020

Last Day to Drop w/o Transcript Record: August 30, 2020

Last Day to Change CR/NR: September 11, 2020

Last Day to Drop w/o Letter Grade Assigned: October 19, 2020

**Need for Assistance:** If you have any condition, such as a physical or learning disability, which will make it difficult for you to carry out the work as I have outlined it, or which will require academic accommodations, please notify me as soon as possible.

**Posting of Grades:** Final grades will not be posted. If you wish to have your final grade sent to you, please bring a self-addressed, stamped envelope to the final exam.

**Attendance:** Attendance of lectures and labs is required and roll will be taken at each meeting. A "tardy" is considered an absence unless the student contacts and explains the incident. Students must make prior arrangements with the instructor to be excused from lectures and labs, make-up of missed tests and labs are permitted only with excused absences.