Plant Biology (Summer 2024)

First session, 3-week intensive, July 10-28

Faculty: Lalita Calabria, Ph.D. (calabril@evergreen.edu)

6 credits; CRN First Session (6): 40021

Course Description

This 3-week intensive botany course is designed as an introduction to the evolution and diversity of land plants. Weekly lectures will survey the major groups of the Plant Kingdom including bryophytes, seedless vascular plants, gymnosperms, and angiosperms. During synchronous class time, students will review lecture material and study questions to reinforce learning of topics including plant evolution and diversity, life cycles, growth and development and physiology. In virtual labs, students will examine the form and function of plant organs, cells, and tissues though self-guided activities centered around the textbook (Raven and Eichhorn, *Biology of Plants*, 8th ed) which contains high quality microscope images of plants. Weekly open-book exams will help students to practice and gain mastery of the material covered. Students will learn to recognize 25 common native plants of the Pacific Northwest through faculty-led virtual plant walks and participation in an online biodiversity project in *iNaturalist*. This course fulfills the botany prerequisite for more advanced field-based and taxonomy focused programs such as, The Fungal Kingdom, Field Plant Taxonomy and Field Ecology.

About online learning: The course will be taught 100% online. To be successful in this course, students will need access to reliable high-speed internet and a computer. Students can expect our remote teaching to be a blend of ~3 hours a week of synchronous (scheduled) using Zoom and 18-20 hours a week of asynchronous work. Students will be expected to turn in all work on Canvas.

***Required Textbook**: Biology of Plants*. (8th edition) Raven and Eichhorn. 2013 and *Plants of the Pacific Northwest*. Pojar and Mackinnon

***Synchronous class time will be from 11-2pm on Wednesdays.** Below is a suggested asynchronous weekly schedule for completing study questions, watching video lectures, completing labs and field work independently.*

Monday	Tuesday	Wednesday	Thursday-Sunday
AM: Watch lecture video/complete study questions	AM: Watch lecture video and complete study questions	AM: Watch lecture video and complete study questions	AM: Complete botany lab
PM Plant walk/*iNaturalist*		**11-2pm Synchronous Class Time- Review Weekly Lectures/ Study Questions**	Complete weekly exam (Due Sunday at midnight each week 3, 4 and 5)