Biology 1308  Plant Biology

An introduction to the World of Plants based on classwork on the SMU in Taos campus.

This course will introduce you to the life cycles, taxonomy and the economic, social, and industrial aspects of plants in an evolutionary context. It includes the equivalent of one laboratory session each week and meets 3 hours of the curricular requirements for non-science students. Lectures and field trips around the Taos area will provide a rich experience for the diversity of plants in the northcentral mountains of New Mexico.

The instructor is Dr. John Ubelaker Professor of Biological Sciences. Dr. Ubelaker is recognized as an outstanding instructor and has received numerous awards for his teaching skills including the Altschuler Outstanding Teaching award. He has served the University as Departmental Chair in Biology and as a Director of the SMU in Taos campus. The lectures will be given on the campus with opportunities to examine the plants being discussed during the sessions. The opportunity to collect some of the plants, learn plant pressing techniques and perform experiments on some plants will greatly aid your understanding of this important group of living organisms.

For additional information please feel free to contact Dr. Ubelaker by email at Ubelaker@smu.edu.

This outstanding Educational course is only offered on the Taos campus.
Syllabus Plant Biology 1308

J term, Taos New Mexico

This course explores the basic concepts of plant biology by providing an exciting introduction to the economic, social and industrial aspects of plant substances and materials using native plants of the northcentral region of New Mexico. It is offered in the J term at Fort Burgwin, SMU-in-Taos campus, New Mexico.

Instructor: Professor John Ubelaker. Dr. Ubelaker is a full professor in the Department of Biological Sciences at SMU. He was recognized by SMU students as a HOPE honoree (Honoring our Professors’ Excellence) in 2011, 2012, 2013 and 2014 and in 2009 was named a Ruth Altshuler Distinguished Teaching Professor by SMU. He is an outstanding University lecturer with many years of teaching popular courses on the Taos campus.

Office hours: Available all day and evenings until 8:30.

Housing: Lower Chalet

Telephone: 214 726-5014

Email Ubelaker@smu.edu

Required Resources: Workbook to be provided upon arrival to the Taos campus.

Mission Statement: This course introduces you to the major botanical features of earth with emphasis on plant diversity and the requirement of plants for specific environmental features. Its primary goal is to provide a basic understanding of plant
structures, life cycles and the role of plants in ecosystems. This course meets 3 hours of the science requirement for non-science majors.

**Learning Outcomes and Benefits:** Students will be able to recognize the major plant families of northcentral New Mexico using significant evolutionary important features of the plants. Students will be able to distinguish the major scientists in botany by identifying scientific contributions from Aristotle to Darwin and to document worldwide botanical diversity. Students will have an in-depth familiarity with several plant families important to Western Cultures. Students will receive 3 hours of Science credit. Students will learn in a mountain region of New Mexico with an outstanding landscape.

**Professionalism:** Professionalism will be measured by the professor’s subjective assessment of your approach to the class and class work, industry and preparation before class, meaningful oral participation during class and punctual attendance. Extra credit is not available in this class.

**Policies:** Students requesting reasonable accommodation on any course component for learning differences or bonafide religious observation must contact the professor during the orientation period. Only requests accompanied by a letter of documentation by the appropriate person in authority will be considered.

**Disability Accommodations:** Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS).
Students may call 214 768 1470 or visit http://www.smu.edu/Provost/ALEC/DASS to begin the process. Once registered students should then schedule an appointment with the professor upon arriving in Taos to make the appropriate arrangements. Please note that accommodations are not retroactive and require advance notice to implement.

**Religious Accommodations:** Religiously observant students wishing to be absent on holidays that require missing class should notify me in writing upon arrival to the Taos campus to determine acceptable ways of making up any work missed because of the absence (See University policy No. 1.9).

**Excused Absences for University Extracurricular Activities:** Students participating in an officially sanctioned scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue)

**The University Honor Code will be strictly followed.**
Course Schedule

Lectures 9-12; lunch 12-1 Lab 1:30-4

January

8  Arrival on campus and orientation at 6:30 after dinner

9. First day of class, Early history of botany recognizing variation in plants from Aristotle, Plato, Dioscorides, Ray, plant pressing. Lab mounting plants for study; aspen study.


11. Charles Darwin and Evolution. Lab on Algae, Fungi and Lichens

12. Mosses, horsetails, ferns, Gymnosperms, review

13. Mid term exam 9:30

14-15 free days

16. Angiosperms, lab on Angiosperms with film

17. Angiosperm families; lab with film and review

18 Final exam
19. Departure by 10 AM

This is a very intense experience. Please let me know if I can help in any way. Thanks, John Ubelaker