

Fall, 1998
Bemis/Nolte
Reedley College

Lecture: Monday & Wednesday 1300-1350
Lab: Monday or Wednesday 1400-1650
Room: FEM 8

NR 4 - FOREST BIOLOGY

OBJECTIVES

This course is designed to introduce the student to the basic concepts of biology using the scientific method of analysis. The course deals with both plant and animal concepts, and directly relates those basic principles to the practical aspects of field forestry situations. The course will delve into the macro and micro structures of life so the student can better relate to how forest ecosystems function.

NO TEXTBOOK REQUIRED

There will be considerable amounts of handout materials and assigned readings. All supplemental materials will be no expense to the student.

ATTENDANCE

The class will meet **promptly** at 1300 each Monday and Wednesday. Labs are scheduled on **either Monday or Wednesday** at 1400 as per the attached schedule. Class sessions will run the full time for both lecture and lab. Good attendance is required throughout the course. Two weeks of unexcused absences (total) can result in the student being dropped from the course. Excused absences: illness, medical, dental and similar appointments, death or serious injury/illness in your immediate family, and some court appearances (on a case-by-case basis) are allowed. The instructor will evaluate all others as to whether or not it qualifies as an "excused" absence.

When you know you are going to be absent, it is your responsibility to contact the instructor at 638-3641, extension 260 or 310. Some missed work may be allowed to be made up at the discretion of the instructor. There is no make-up for missed quizzes. Regular exams and lab assignments missed will have a one (1) week grace period with a 10% deduction in the possible score, after which time no credit will be allowed for missed work. Also, missed labs can be made up in either section within one week as above. Otherwise, no credit will be granted.

Quizzes will be unannounced and will cover material recently discussed in class. If you arrive late to class, it is the student's responsibility to inform the instructor after class so that your absence will be changed to a "tardy". Two tardies constitute one absence. After two weeks of consecutive absences, the student will be dropped. Students will also be dropped after any six (6) unexcused absences. Reinstatement will be allowed only if extenuating circumstances can be shown. **The responsibility to drop a course lies with the student. THE LAST DAY TO DROP A COURSE WITHOUT PENALTY IS FRIDAY, OCTOBER 16, 1998, by 1700.**

COLLEGE POLICIES

Campus codes require shoes (sandals acceptable) and a shirt be worn at all times. No eating, drinking, or smoking (including the use of smokeless tobacco) is allowed in classrooms or during class activities. No children and/or pets will be allowed to "sit in" and no animals allowed in the buildings.

No student may carry a knife of any kind with a blade which exceeds 3 inches in length. For field activities in the forestry program, you may carry a folding knife or sheathed knife which exceeds 3", but for that activity only.

No skateboards or rollerblades, etc. are allowed in class or on anywhere campus.

The student must complete the entire course (including the final exam) in order to receive a passing grade.

If a student is caught cheating or plagiarizing another's work, they will be dropped from the course with a subsequent grade of "F".

INSTRUCTOR'S POLICIES

During lectures there will be no talking with associate students. Repeated violations of this policy will result in dismissal from class at the discretion of the instructor for the student's return.

Male students will remove their hats while in the classroom.

No "horseplay" will be tolerated at any time.

Anything you bring with you to class will be removed when you leave. If you have refuse to be disposed of, use the trash receptacle provided in the room.

Misuse of equipment and/or supplies will be paid for by the student(s) responsible. All damage to equipment must be reported to the instructor.

Make-up work and some extra credit will be allowed for students by assisting the instructor in setting up labs, etc. All other extra credit must be arranged on an individual basis with the instructor.

GRADING

There will be at least three (3) tests and a final exam on the lecture material. Each exam will cover material from the beginning of the course, with emphasis on new subject matter. No materials will be on an exam which are not covered in lecture or lab. All exams are comprehensive and objective, and will frequently contain some essay questions requiring short written answers. There will also be numerous handouts which support the lecture materials; you are also held accountable for them on exams.

There will be numerous unannounced quizzes which will cover materials and subjects recently discussed in class.

LABORATORY

Each student will take part in one (1) three-hour lab per week according to the attached schedule. During these sessions, we will cover materials which support the lecture and supplement some future courses. They may not be in the exact sequence as the lecture materials. There may be lab quizzes which will cover data and subjects from previous labs. Most labs will have an exercise to complete, others will require a written report on field trips, etc. to be turned in. The exercises will have a value of between 20-60 points.

Students will need unlined, white paper (biology paper) and various grades of lead pencils (2.5, 3H, 4H) as some anatomical drawings will be required. A lab final may be given. The lab portion of the course will count for about 40% of the total grade. Point distribution is as follows:

Lecture Exams I, II, III	...	300±
Quizzes (10-20 points each)	...	100±
Lab Reports (20-60 points each)	...	460±
Class Project (species i.d.)	...	60±
Field Trip Reports (2)	...	80±
Final Exam	...	<u>200±</u>
Total	...	1200±

Extra credit: There will be opportunities for students to earn extra credit, both in lecture and lab. Arrangements must be made early in the semester for extra credit. No more than 85 points of extra credit will be awarded to any student.

EXTENDED FIELD TRIPS

There will be an all-day field trip to the High Sierra late in the fall. There may also be a trip to our school forest at Sequoia Lake. This will be scheduled later in the semester.

It is the students' responsibility to notify **all** instructors (in advance) of extended field trips. Also, remember you are responsible for any work you may miss in other classes while attending an all-day or overnight field trip. Be sure to check with other instructors **before** trips and made arrangements to make up missed work.

NOTE

Please see an instructor whenever you encounter **any kind of problem**. We are here to help.

Bemis phone number is 638-3641, extension 3275. Office - Room FEM 3
Bemis office hours are: Monday, Tuesday, Wednesday 1200-1300
Friday 1100-1200
Also available at other times by appointment.

Nolte phone number is 638-3641, extension 3499. Office - Room FEM 10
Nolte office hours are: Monday, Wednesday, Friday 10:00-11:00
Tuesday, Thursday 9:00-10:00

SCHEDULE

<u>Date</u>	<u>Lecture</u>	<u>Lab</u>	<u>Chapter Assignment</u>
Aug. 17	Introduction, Conduct of Course, What is Biology?	Microscope & Lab Orientation	1
Aug. 19	Characteristics of Life Scientific Method	Microscope & Lab Orientation	2
Aug. 24	Molecular Basis of Life	Cells in Plants & Animals	2
Aug. 26	Organization of Matter	Cells in Plants & Animals	3
Aug. 31	Cell Structure & Function	Tissues in Plants & Animals	3
Sept. 2	Cell Structure & Function Metabolism	Tissues in Plants & Animals	4
Sept. 7	Labor Day Holiday	(No lab)	
Sept. 9	Exam I	(No lab)	
Sept. 14	Metabolism, Photosynthesis	Mitosis	5
Sept. 16	Energy Pathways (Photosynthesis)	Mitosis	6
Sept. 21	Energy Pathways (Respiration)	Meiosis	
Sept. 23	Principles of Inheritance (Mitosis)	Meiosis	7
Sept. 28	Principles of Inheritance (Meiosis)	Genetics	8
Sept. 30	Patterns of Inheritance	Genetics	9
Oct. 5	All day field trip to Kaiser Ridge	(No lab)	
Oct. 7	Exam II	(No lab)	
Oct. 12	DNA to Proteins, DNA Structure	Flowers	10, 11
Oct. 14	Genetic Engineering	Flowers	12, 13
Oct. 19	Principles of Evolution (Microevolution)	Fruits & Seeds	14
Oct. 21	Principles of Evolution (Speciation)	Fruits & Seeds	15, 16
Oct. 26	Origin & Evolution of Life	Plant Seed Project	17
Oct. 28	Diversity of Evolution	Plant Seed Project	18, 19

Continued on next page ...

<u>Date</u>	<u>Lecture</u>	<u>Lab</u>	<u>Chapter Assigned</u>
Nov. 2	Organism Classification (Plants) (Species I.D. assigned)	Roots	20
Nov. 4	Organism Classification (Animals)	Roots	21
Nov. 9	Animal Structure & Function (General Characteristics)	Stems & Leaves	25, 26, 27
Nov. 11	<u>Exam III</u>	Stems & Leaves	
Nov. 16	Ecology & Behavior	Plant I.D.	35
Nov. 18	Population Ecology	Plant I.D.	36
Nov. 23	Ecosystems & Ecosystems	Diversity of Life	37
Nov. 25	Community Interactions	Diversity of Life	38
Nov. 30	Community Interactions	Riparian Ecology <u>Seed Project Due</u>	39
Dec. 2	Human Impact on Biosphere	<u>Seed Project Due</u>	39
Dec. 7	Human Impact on Planet Earth	No lab	
Dec. 9	Wrap-up & Review <u>All Lab Reports & Papers Due</u>	No lab	
Dec. 18	FINAL EXAM - 1300-1500		