INSTRUCTOR

Dr. YUHUI WENG
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Office Hours: Monday & Tuesday: 1:00 – 4:00pm or by appointment

TIME AND PLACE

When: Wednesday, 6:45 pm – 9:15 pm
Where: Forestry 205

COURSE DESCRIPTION

3 semester hours, two and half hours lecture per week. Concepts of stand-level and forest-level timber harvesting schedules. Prerequisite: FOR205 is required and FOR317 is useful but not required. Fall semester only.

PROGRAM LEARNING OUTCOMES

Forestry 411 is an art and science that involves the integration of silvicultural practices and economics principles to best achieve management goals of timber landownerships. Forestry 411 is a required class for all forest management majors and thus competency is required. The student must pass this course; otherwise the course will have to be repeated. The course is designed to address the following Program Learning Outcomes (PLOs), as stated in the BSF Program Matrix:

1) Demonstrate understanding and competency of forest ecology and biology,

2) Demonstrate understanding and competency in the measurement of forest resources,

3) Demonstrate understanding and competency in managing forest resources,

4) Demonstrate understanding and competency of forest resource policy, economics, and administration, and

5) Demonstrate understanding and competency in oral and written communication skills.

The above PLOs are also recognized as vital components by the Society of American Foresters, the program’s accrediting agency.
A – Advanced – FOR 411 supports Program Learning Outcome by providing students with transitional, high level topic-specific information, activities, and opportunities that enable the students to apply their critical thinking and tactical skills to resolve increasingly challenging strategic situations.

STUDENT LEARNING OUTCOMES

Upon successful completion of this course, the student will:

1) Understand growth and yield analysis techniques used to help design forest management plans and harvest schedules (PLO #2 and 3),

2) Be able to use computer programs to find optimal solutions to quantitative problems in harvest scheduling, wood flow analysis, and balancing multiple as well as conflicting land use objectives. (PLO #1, 2, and 3), and

3) Be able to interpret results of a forest growth and yield analysis in the context of forest management objectives, forest finance decisions, and long-term sustainability (PLO #1, 3, 4, and 5).

COURSE GOALS AND OBJECTIVES

This course is designed to teach forestry undergraduate students the concepts and techniques of forest management planning. Intent of this course is to help students understand the principles of timber management that include timberland valuation, forest production, harvest scheduling, and principles of sustainability. Students will learn about the different components used to develop forest plans, including forest growth models, mathematical optimization techniques, economics, spatial analysis, and planning models.

SUGGESTED TEXTBOOKS

COURSE REQUIREMENTS, GRADING SYSTEM, & ATTENDANCE POLICY

Grades will be based on the number of points earned in assigned projects. A total of 100 points are possible. On a percentage basis, final grades will be computed as: 90+ = A, 80 – 89 = B, 70 – 79 = C, 60 – 69 = D.

There will be 4 graded homework, with each being worth 10 points, for a total of 40 points. Homework are due the week following when they were assigned. Failure to turn in an assignment by the due date will result in a deduction (5% every 24 hours delay) for that assignment. You can work together on the homework but note that copying from fellow student is detrimental for learning environment and will not be tolerated at all.

There will be two exams (each worth 30 points). Exams will be given on regular class time. You must take the exam at the scheduled time, unless you have an excused absence. Exams will encompass materials from lecture notes, reading assignments, and homework assignments. Exams will be returned only to review grades, but you will not be able to keep the exams permanently. Make-up exams will only be given for students who provide me advanced notice or for university approved extreme circumstances.

I will randomly check attendance for 5 lectures; if you miss 3 or more (with no reason), there will be a reduction of 15% for your final grade. It is my expectation that students attend all classes, arrive on time and get involved in discussions.

Academic Integrity (A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or
plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. Please read the complete policy at [http://www.sfasu.edu/policies/student_academic_dishonesty.pdf](http://www.sfasu.edu/policies/student_academic_dishonesty.pdf)

**Withheld Grades Semester Grades Policy (A-54)**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Students with Disabilities**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Responsible Use of Technology**

It is expected that all students will only use cell phones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class or other penalties.

**Acceptable Student Behavior**

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy 10.4). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other
assistance that is available to help SFA students succeed. Please read the complete policy at http://www.sfasu.edu/policies/student-code-of-conduct_10.4.pdf

SOCIAL JUSTICE STATEMENT

The Arthur Temple College of Forestry and Agriculture at SFASU is committed to social justice. I concur with that commitment and expect to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

COURSE CONTENT AND TENTATIVE SCHEDULE

Week 1: Introduction
Week 2: Valuing and Characterizing Forest Conditions (Biological measures)
Week 3: Valuing and Characterizing Forest Conditions (Economic measures) (HM #1)
Week 4: Estimation and Projection of Stand and Forest Conditions
Week 5: Estimation and Projection of Stand and Forest Conditions (HM #2)
Week 6: Optimization of Tree and Stand Level Objectives
Week 7: Sustainability and Models of Desired Forest Structures
Week 8: Control Techniques for Resource Outputs (HM #3)
Week 9: Exam 1
Week 10: Linear Programming
Week 11: Linear Programming
Week 12: Linear Programming (HM #4)
Week 13: Thanksgiving Holiday
Week 14: Forest Certification and Carbon Sequestration
Week 15: Others
Week 16: Exam 2