SYLLABUS AND POLICY STATEMENTS
FOR 317 -- FOREST BIOMETRICS II
FALL 2019

INSTRUCTOR

Dr. Yuhui Weng
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Office Hours: Monday, Tuesday & Thursday: 9:30 – 11:50 am or by appointment

TIME AND PLACE

Lecture: Wednesdays, 6:45 pm – 9:15 pm
Where: Forestry Building 205

COURSE DESCRIPTION

3 semester hours, 3 hours lecture per week. Quantifying forest timber stand structure with respect to basic stand parameters. Prerequisite: FOR 205.

PROGRAM LEARNING OUTCOMES

Forestry 317 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.
B.S. Forestry Program Learning Outcomes

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A – Advanced – FOR 317 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.

I – Intermediate – FOR 317 supports Program Learning Outcome by providing students with topic-specific information, concepts, applications, and lab activities that increase the students’ skills in making tactical implementation decisions relative to the expected outcomes.

STUDENT LEARNING OUTCOMES

Upon successful completion of this course, the student will:

1) Understand advanced forest sampling techniques used to quantify stand structure and timber resources (PLO #1 and 2),
2) Be able to analyze and project forest inventory data to assess current & future forest conditions (PLO #1 & 2),
3) Be able to interpret results of forest inventory data analysis in the context of timber management objectives and forest management decision-making (PLO #3 and 5), and
4) Understand professional ethics, including SAF Code of Ethics, & recognition of ethical responsibility to adhere to those ethical standards in forestry decision making on behalf of clients & public (PLO #4).

COURSE GOALS AND OBJECTIVES

This course will primarily provide students with a deeper understanding of forest inventory techniques. During the semester, we will learn about various sampling designs that are used in forest inventory. Students will enhance their ability to use computer software (e.g., Excel) to analyze forest inventory data. Depending on student interest and time availability, we will also learn about advanced growth and yield topics, such as how to construct volume and taper equations. This course is primarily intended for upper-division forestry undergraduates and forestry graduate students with an interest in forest biometrics. However, interested students from other disciplines are certainly welcome.
REQUIRED TEXT AND OTHER REFERENCE TEXTS


COURSE REQUIREMENTS, GRADING SYSTEM, & ATTENDANCE POLICY

Grades will be based on the number of points earned in exams and homework assignments. 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.

Lectures: I will not check attendance. As forestry professionals, I expect every person to attend lecture because you need to know how to quantify forest resources.

Homework Assignments: There will be 5 graded homework assignments, each worth 8 points, for a total of 30 points. Homework assignments are due one week following the assignment date. Failure to turn in a homework assignment by the due date will result in a ZERO for that assignment. You must show all your work on each problem; failure to do so will result in no credit for a problem. You can work together on the homework assignments.

Exams: There will be two exams (each worth 30 points). You must take the exam at the scheduled time, unless you have an excused absence. Exams will be returned only to review grades, but you will not be able to keep the exams permanently. You must work alone on the exams.

Student Academic Dishonesty Policy (4.1)

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

**Course Grades Policy (5.5)**

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. Please read the complete policy at http://www.sfasu.edu/policies/5.5_course-grades.pdf

**Academic Accommodation for Students with Disabilities Policy (6.1)**

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/

**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

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<td>Introduction / Basic statistics</td>
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<td>2</td>
<td>Basic statistics</td>
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<td>3</td>
<td>Simple random sampling</td>
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<td>Systematic sampling</td>
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<td>5</td>
<td>Stratified random sampling</td>
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<td>Stratified random sampling (cont.)</td>
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<td>7</td>
<td>Ratio/regression estimators</td>
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<td>8</td>
<td>Ratio/regression estimators (cont.) (Exam 1)</td>
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<td>9</td>
<td>Double sampling</td>
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<td>Inventory methods for estimating stand growth</td>
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<td>Thanksgiving break</td>
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<td>Inventory methods for estimating stand growth (cont.)</td>
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