FOR 347-001: Silviculture, Spring 2020
FOR 347-020: Silviculture Lab, Spring 2020

Course Details
Instructor: Dr. Jeremy Stovall         Phone: (936) 468-2127
Email: stovalljp@sfasu.edu           Office: 214 Forestry                   Office Hours: By appointment

Generally I maintain an open door policy, and keep a schedule posted by my door. My desk is in the back room, so come on in if the door is open. Please feel free to stop by my office whenever. If you are coming to campus specifically to see me it would be best to make an appointment by email. I check email frequently and reply as soon as possible, within 24 hours M - F at most.

Class:  8:00am – 8:50am Tuesday and Thursday, Forestry 221
Lab:    2:00pm – 4:50pm Thursday, Forestry 221

Course Description
FOR 347. Silviculture - 3 semester hours, 2 hours lecture and 3 hours lab per week. Study of silvicultural systems, regeneration and intermediate management from ecologic and economic viewpoints. Required field trips. Prerequisites: FOR 205, FOR 209, FOR 310. Course fee required.

Program Learning Outcomes
Forestry 347 is one of the forestry core courses required of all forestry majors and thus competency is required. A minimum grade of a “C” must be attained or the course will have to be repeated. The course is designed to address the following Program Learning Outcomes, as given 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.
5. Demonstrate understanding and competency in oral and written communication skills.

*Items #1 - #4 above are required by the Society of American Foresters, the program’s accrediting agency.
*This is not a General Education Core Course

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A – Advanced – FOR 347 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.

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Student Learning Outcomes
Upon the completion of this course, successful students will:

1. Demonstrate an understanding of stand dynamics, including concepts of stand structure, function, establishment, growth, composition, health, and quality (PLO 1).

2. Explain the ecological underpinnings and technical considerations for common regeneration, establishment, and intermediate treatments that comprise modern silvicultural systems (PLO 1, 2).

3. Develop data-driven, time- and space-bounded prescriptions for forest stands considering ecological, economic, and societal aspects of management decisions in an ethical context (PLO 1, 2, 3, 4, 5).

4. Communicate technical material clearly to a variety of audiences using text, tables, graphs, and maps, including logical rationale supporting management decisions (PLO 5).

5. Create solutions to real-world forest management challenges by applying higher-order thinking skills to their knowledge of silviculture (PLO 1, 2, 3, 4, 5).

Text and Materials
- Recommended: Eyre. *Forest Cover Types of the US and Canada* (SAF 1980)
- A hard hat (per college policy).
- Appropriate clothing and boots for the field.
- A clip board for taking notes in the field.
- A calculator.

Course Website
Reading quizzes, lectures, course documents, and grades will all be available on the silviculture course website, which can be found at: [http://forestry.sfasu.edu/faculty/stovall/silviculture/](http://forestry.sfasu.edu/faculty/stovall/silviculture/) or google “SFA Silviculture”.

Course Requirements
Quizzes: Quizzes will typically be given at the beginning (8:00 am) of regularly scheduled lecture times. On average there will be one quiz per week, but it will vary between Tuesday and Thursday lecture sessions. Some weeks there may be two quizzes, and some weeks there may be no quizzes. Quizzes will be closed book and note, timed, and an individual effort. Following the quiz, we will go over any questions you might have. Quizzes will be graded and returned to you by the next class session.

Quizzes will follow a similar format each week:
- Two questions will cover terminology from the Silviculture Terminology List. Definitions do not need to be verbatim, but they do need to contain all the major components of the definition. The exception to this rule is the definition of the term ‘silviculture’, which must be verbatim.
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(except for the order of some items in the lists, provided changing order does not change the meaning).

- One short answer question will cover concepts from previous lectures, typically focusing on more recent material. However, by its nature the course is cumulative.
- One short answer question will cover concepts from the assigned readings for that day. This question will not require you to memorize every detail of the readings, but will focus on general concepts of the reading that you will not be able to guess if you have not completed the reading.
- One question will cover quantitative concepts (math!) we are learning, and will be cumulative throughout the course. Example problems are available on the course website. Be sure to bring a calculator to each quiz.
- One additional question from any one of the above categories.

Each question is worth two points, meaning each quiz is worth 10 points, but there are 12 possible points. Partial credit may be awarded on each question. If you miss a quiz due to an excused absence or tardiness which you have informed me of prior to class, your grade will be recorded as a 0/0, which will not affect your overall course grade. If you miss a quiz due to an unexcused absence, or are late to class without prior approval, you will not be able to take the quiz and will earn a 0/10. No makeup quizzes will be given, and no quizzes will be dropped. During the final exam period a ‘big quiz’ will be given worth 4 individual quizzes. No reading questions will be included on the ‘big quiz’.

If you require additional time or other accommodations, please work with disability services and the instructor at the beginning of the semester. This may require you to come in early or before class to take quizzes, but I will be available as needed.

**Lab Exercises:** Lab exercises will mostly entail prescription writing, and will be completed in the field during the lab period. Some exercises will be completed individually, while some will be completed in groups. Bring your useful handouts packet and a calculator to each lab. Hardhats will be worn at all times that you are beneath tree-cover. Appropriate clothing, including pants and boots, is required for the labs. Some labs on bottomland sites may require wading. If you are inappropriately dressed you will be sent home and will receive a zero for that lab’s assignments (see attendance policy below). It is at the discretion of the instructor what appropriate dress for the field is. Please do not wear sandals, tennis-shoes, sneakers, crocs, flip-flops, slippers, etc. You may also require a jacket or rain gear in the winter and drinking water during warm weather, as appropriate. Your lab will meet every week as scheduled. If we are scheduled to go to the field, then we will go, regardless of weather conditions. Come to lab appropriately dressed. Tobacco products and vaping are not permitted in lab.

**Grading Policy**

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<th>Item</th>
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<tr>
<td>Quizzes</td>
<td>50%</td>
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<tr>
<td>Lab Exercises</td>
<td>50%</td>
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| COURSE GRADE | 100% |

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<tr>
<th>Percent Grade</th>
<th>Letter Grade</th>
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<td>79.44 – 69.45%</td>
<td>C</td>
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<td>&lt;59.45%</td>
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Grades will be made available on the course website throughout the semester. Final grades or individual assignments may be curved if deemed appropriate by the instructor. Breakpoints between letter grades in the table above may be lowered for the whole class mid-semester as needed. Applying a curve or changing break points will not result in the lowering of any student’s grade. Additionally,
bonus opportunities are offered to the entire class and will be evaluated for credit at the discretion of the instructor. A list of bonus opportunities is available on the course website. Each bonus point is worth 0.2 points on one quiz, thus 50 bonus points is worth a 10/10 on a quiz. It is strongly recommended that all students complete as many bonus opportunities as possible to improve their understanding of silviculture. Bonus points are due at various times during the semester.

A grade of 0 will be given to all involved parties on any lab or quiz on which cheating occurs. A second instance of any type of involvement in cheating by any individual will result in an F in the course.

**Attendance Policy**

Attendance is important to successfully achieve the student learning outcomes described above. Attendance will be taken within the first 5 minutes of all classroom and lab sessions. An unexcused lab absence will result in a grade of zero for any assignments missed. Please make every effort to attend all labs. It is university policy to excuse students from attendance for certain reasons. Among these are absences related to health, family emergencies and student participation in university-sponsored events. Students are responsible for providing documentation satisfactory to the instructor for each class missed prior to the absence. Class session attendance is mandatory, and unexcused absences may result in lowered grades on individual assignments.

**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/4.1-student-academic-dishonesty.pdf](http://www.sfasu.edu/policies/4.1-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](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/](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

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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

Notes on moving online in response to COVID-19

My first attempt at moving our silviculture course online will focus only on the period before April 6. I hope that we will be able to resume the typical face-to-face format of the course on Tuesday, April 7. If not, I will update you again later. All the details are below.

Schedule: To do this, I am completely reshuffling the upcoming schedule so that I can provide you with a very similar experience to our own FOR 347 lectures and labs using existing online resources, and hopefully one new long-form video that will be created. Use the descriptions and links on this page, and please begin following the new course schedule on the following page. The course website has been updated, and there is still nothing posted for FOR 347 on Brightspace by D2L. I have posted my usual 347 lecture slides, so you can see how they compare to the online materials we are using during this period.

All you’ll need is an internet connection and a phone or laptop on which to watch some freely available videos. There will be no additional costs for the course.

Until we return to a face-to-face format, the course will be asynchronous. That means you can complete the lectures and lab on your schedule. If you’d like to enjoy a whole day of silvicultural binging, feel free. If you want to space it out, that works too. The only deadline remaining is for bonus points on reading questions. The reading questions must be submitted by 7:30am on the scheduled date of the lecture on the next page.

Quizzes: Fortunately, we are already ahead of schedule on quizzes. There will be no lecture quizzes prior to April 7. Material in these lectures will be fair game for any future quizzes. I have updated the terms list to the new schedule, as well as the online terms quiz.

Bonus Opportunities: All bonus opportunities are still fair game and unchanged. Submit them by email.

Office Hours: I will respond by email promptly M-F 8am-5pm. I will respond in the evenings and on weekends as well, but it may not be as prompt. If you would like to speak by phone, I would be happy to do so. Email me a number where I can reach you, and 3 or 4 times that work. I’ll then call you ASAP.

Lecture 16 (https://cutt.ly/ztfvZm6) and 17 (https://cutt.ly/Etfx2zB) are webinars I recorded in 2014 for a program called PINEMAP. They are what I used to build these lectures for FOR 347, so the content is very similar. These slides are available here for lecture 16: https://cutt.ly/dtfxX18 and here for lecture 17: https://cutt.ly/itfxB9X

Lecture 18 (https://cutt.ly/etfkfWG) is a webinar presented as part of the ForestConnect series by Peter Smallidge and Dave Jackson, extension foresters with Cornell and Penn State, respectively. It is a freely available youtube video. This is a similar lecture to what I provide in 347, although focused more on hardwood management in the northeast, which should provide an interesting context to broaden our perspective. You can download the powerpoint slides here: https://cutt.ly/QtfkRRI

Herbicide Application Lab will hopefully be a ~90 minute video we create starring our own Mr. Grogan and filmed by Sarah Fuller. I don't yet know if this will be possible, but will update you with a link if we can accomplish this in time. In most semesters, this lab does not include a graded assignment.

Lecture 19 (https://cutt.ly/ttfiOZK) is another webinar presented as part of the ForestConnect series by Peter Smallidge of Cornell. It is also freely available on youtube. Sorry, but there don’t appear to be slides available. However, you can screenshot the youtube video for any content you’d like to review further.

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Lecture 20 (https://cutt.ly/etfzG0R) is a webinar presented by Kathryn Fernholz of Dovetail partners as part of the University of Minnesota’s Sustainable Forests Education Cooperative. It is a youtube video, and again, I was unable to locate slides.

TENTATIVE REMAINING SCHEDULE****

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<th>WEEK</th>
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<th>LECTURE</th>
<th>READING ASSIGNMENT</th>
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<td>10-Mar</td>
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<td>12-Mar</td>
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<td>10</td>
<td>17-Mar</td>
<td>Tue</td>
<td>16 Intermediate Trtmts: Forest Nutrition 1</td>
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<td>19-Mar</td>
<td>Thu</td>
<td>Online Lecture: <a href="https://cutt.ly/ztfvZm6">https://cutt.ly/ztfvZm6</a> 72 min.</td>
<td>Fox: Development</td>
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<td>17 Intermediate Trtmts: Forest Nutrition 2</td>
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<td>26-Mar</td>
<td>Thu</td>
<td>Online Lecture: <a href="https://cutt.ly/Etfx2zB">https://cutt.ly/Etfx2zB</a> 70 min.</td>
<td>Fox: Tree Nutrition</td>
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<td>12</td>
<td>31-Mar</td>
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<td>19 Silvicultural Systems: Forest Certification</td>
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<td>2-Apr</td>
<td>Thu</td>
<td>Online Lecture: <a href="https://cutt.ly/etfzG0R">https://cutt.ly/etfzG0R</a> 58 min.</td>
<td>Bettinger Paper</td>
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<td>9-Apr</td>
<td>Thu</td>
<td>20 Intermediate Trtmts: Thinning Methods</td>
<td>PS: 461-485 (chpt 21)</td>
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<td>Online Lecture: <a href="https://cutt.ly/tffIOZK">https://cutt.ly/tffIOZK</a> 87 min.</td>
<td>Stocking Guides</td>
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<td>7-Apr</td>
<td>Tue</td>
<td>21 Intermediate Trtmts: Stand Density 1</td>
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<td>22 Intermediate Trtmts: Stand Density 2</td>
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<td>14</td>
<td>14-Apr</td>
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<td>23 Silvicultural Systems: Hardwoods 1</td>
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<td>24 Silvicultural Systems: Hardwoods 2</td>
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<td>23-Apr</td>
<td>Thu</td>
<td>25 Silvicultural Systems: Forestry BMPs</td>
<td>PS: 509-533 (chpt 23)</td>
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<td>16</td>
<td>28-Apr</td>
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<td>26 Silvicultural Systems: Timber Management</td>
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<td>30-Apr</td>
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<td>27 Silvicultural Systems: Longleaf Pine</td>
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<td>Franklin Paper</td>
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<td>5-May</td>
<td>Tue</td>
<td>BIG QUIZ 8:00-10:30 AM</td>
<td>Study</td>
<td>NO LAB</td>
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* OT = Online Textbook freely available on the SFA silviculture website
** PS = Practice of Silviculture (Ashton & Kelty)
*** Readings not in PS are currently available on the course website in the course documents section.

****This schedule is subject to change without notice. However, I will notify you as soon as possible of any changes, even apparently in the case of a global pandemic.

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