Course Summary

Course: SCIN135  Title: Introduction to Forestry with Lab
Length of Course: 8
Prerequisites: Credit Hours: 4

Description

Course Description: This course will examine basic forestry definitions, historical factors in U.S. forest history, forest flora and fauna, forest management, the relationship between forest resources and human uses, and case studies. The Forestry lab provides students with hands-on application of forestry principles with or without having access to forest resources. The course will involve learning techniques for measuring forest resources; identification procedures for soils, trees and climate; and research techniques of current forestry concerns, such as urban forestry and deforestation. If the student has access to forested areas, he or she will be able to conduct research in the field; however, if the student is located in a non-forested area, all necessary data will be available online.

Course Scope:

This eight week course will explore the basic principles of forestry management, including field work in the United States. The student will learn these fundamentals, including relevant terminology, case studies, and will investigate current events in U.S. forestry. The student will be challenged to assess their individual philosophies of forestry at the end of the course. Assignments include final project work, quizzes, and two online exams. The labs will cover general principles of field work and will require basic research, data collection, identifications and synthesis of material. Some basic math will be required for lab completion. If the student does not live in a forested area and will need to do labs online, they must ensure that computer access is substantial enough to complete all labs. No prior experience with forestry is needed for this course, although the student is expected to have enthusiasm for the subject matter.

Objectives

The successful student will fulfill the following weekly learning objectives:

CO-1 Identify forest resources, forest regions, and forestry practices in the United States.

CO-2 Describe forest mensuration, harvesting practices, silviculture and forest management.

CO-3 Describe forest habitats, diseases/pests, succession, and the role of flora and fauna in forest health.
CO-4 Classify and identify tree species and describe tree anatomy.
CO-5 Explain fire and wildlife management and describe physical characteristics of forests.
CO-6 Describe watershed management and define the roles of government/policy in forestry.
CO-7 Compare forest products and practices.
CO-8 Describe forestry technologies and management applications in rural and urban settings.

Outline

Week 1: Lecture: Introduction to Forestry

Learning Objective
CO-1

Reading(s)
Burton: Chapters 1, 2 and 3

Lab:
http://forestry.usu.edu/htm/kids-and-teachers/tree-height-measurement
http://bizarrelabs.com/tree.htm
http://www.fia.fs.fed.us/

Assignment(s) Due

Academic Honor Pledge (see Assignments section of class)

Discussion Forum #1

Extra Credit – Quiz

Lab #1 is assigned, due Week 2

Week 2: Silviculture; Measurements; and Harvest and Reforestation

Learning Objective
CO-2

Reading(s)
Burton: Chapters 4, 5 and 6

Lab (Forest Mensuration Techniques):
http://forestry.usu.edu/htm/kids-and-teachers/tree-height-measurement
http://bizarrelabs.com/tree.htm
http://www.fia.fs.fed.us/
Assignment(s) Due

Discussion Forum #2

Quiz 1
(Chapters 1-6)

Lab #1

Lab #2 is assigned, due Week 3

Week 3: Physiology of Trees; Forest Ecology; Disease and Pests

Learning Objective

CO-3

Reading(s)
Burton: Chapters 16, 17, and 18

Lab (Ecosystems and Species Niche Concept):
http://www.fia.fs.fed.us/
http://www.marietta.edu/~biol/102/ecosystem.html

Assignment(s) Due

Discussion Forum #3

Quiz 2
(Chapters 16-18)

Lab #2

Week 4: Anatomy and Classification of Trees; Tree Identification

Learning Objective

CO-4

Reading(s)
Burton: Chapters 19, and 20

Lab (Application of Forest Identification Techniques):
http://www.arborday.org/trees/whattree/
http://www.extension.iastate.edu/forestry/iowa_trees/tree_id.html
http://forestry.about.com/od/treeidentification/tp/tree_key_id_start.htm
http://dendro.cnre.vt.edu/
http://gardening.ces.ncsu.edu/

Assignment(s) Due
Discussion Forum #4

Midterm Exam (Weeks 1-4)

Lab #3 is assigned, due Week 5

Week 5: Fire and the Forest; Wildlife and Forests

Learning Objective

CO-5

Reading(s)

Burton: Chapters 7 and 8

Lab (Application of Forest Identification Techniques):

http://www.arborday.org/trees/what-tree/
http://www.extension.iastate.edu/forestry/iowa_trees/tree_id.html
http://forestry.about.com/od/treeidentification/tp/tree_key_id_start.htm
http://dendro.cnre.vt.edu/
http://gardening.ces.ncsu.edu/

Assignment(s) Due

Discussion Forum #5

Quiz 3
(Chapters 7-8)

Lab #3

Lab #4 is assigned, due Week 6

Week 6: Water Quality and Watershed Management; Role of Government and Safety in Forests

Learning Objective

CO-6

Reading(s)

Burton: Chapter 9 and 10

Lab (Tropical Deforestation):

http://earthobservatory.nasa.gov/Features/Deforestation/deforestation_update.php
http://earthenginepartners.appspot.com/science-2013-global-forest

Assignment(s) Due

Discussion Forum #6
Quiz 4  
(Chapters 9-10)

Lab #4

Week 7: Wood Construction Materials; Specialty Forest Products; and Plantation Products and Practices

Learning Objective

CO-7

Reading(s)

Burton: Chapters 11, 12, and 13

Lab (Urban Forestry):

http://www.umass.edu/urbantree/inventorywhitepaper.pdf

http://caseytrees.org/resources/maps/dc-street-trees/

Assignment(s) Due

Discussion Forum #7

Final Project

Lab 5 is assigned, due Week 8

Week 8: Urban Forestry; and Space Age Forest Technologies

Learning Objective

CO-8

Reading(s)

Burton: Chapters 14 and 15

http://www.umass.edu/urbantree/inventorywhitepaper.pdf

http://caseytrees.org/resources/maps/dc-street-trees/

Assignment(s) Due

Discussion Forum #8

Final Exam

(Weeks 1-8, mostly Ch 7-15)

Lab #5

Evaluation

Forum Discussions
There are eight (8) Forums Discussions. Forum topics are posted within the Forum section of class. Participation is mandatory. Students must submit their work within the ‘Forum’ section of class. Each student must participate in each forum during the week assigned. Submissions must be thoughtful, intelligent, and courteous. Students will be expected to exercise their critical thinking skills, not merely reply “I agree” or “good post.”

**Quizzes**

There are four (4) timed quizzes. The quizzes are mixed-format questions which could include multiple choice, true/false, fill in the blank and essay questions. Quizzes are timed.

**Exams**

There is a midterm and final exam. The Final Exam is comprehensive and will cover all chapters and material assigned from Weeks 1-8. The exams will consist of mixed-format questions which could include multiple choice, true/false, fill in the blank and essay questions. The midterm and final are timed.

**Labs**

There are five (5) labs in this class. The labs are a combination of computer and hands on activities. Each lab’s instructions are under Assignments; labs are submitted under Tests and Quizzes unless otherwise instructed. Students have 2 weeks to complete lab work.

**Final Project**

The final project is a research assignment. Students will have 4 weeks to complete the research.

Please see the [Student Handbook](#) to reference the University’s grading scale.

**Grading:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Grade %</th>
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<tbody>
<tr>
<td><strong>Forums</strong></td>
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<tr>
<td>Forum 1 (due Week 1)</td>
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<tr>
<td>Forum 2 (due Week 2)</td>
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<tr>
<td>Forum 8 (due Week 8)</td>
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<td><strong>Quizzes</strong></td>
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<td>Quiz #3 (due Week 5), Chapter 7-8</td>
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<td>Quiz #4 (due Week 6), Chapter 9-10</td>
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<td>Lab 2 (due week 3): Modern Forestry Research</td>
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<td>Lab 3 (due Week 5): Tree ID Lab Worksheet</td>
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<td>Lab 4 (due Week 6): Tropical Deforestation</td>
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<td>Lab 5 (due Week 8): Urban Forestry</td>
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<td>Final Project</td>
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<td>Final Project (due Week 7)</td>
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<td>Midterm (due Week 4), Weeks 1-4</td>
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<td>Final Exam</td>
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<td>Final Exam (due Week 8): Weeks 1-8</td>
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<tr>
<td>Extra Credit</td>
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<tr>
<td>Introductory Quiz (due Week 1), Extra Credit</td>
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<tr>
<td>Extra Credit (due Week 8) - optional</td>
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### Materials

**Book Title:** Introduction to Forestry Science, 3rd ed. - The VitalSource e-book is provided via the APUS Bookstore  
**Author:** Burton  
**Publication Info:** Cengage  
**ISBN:** 9781111308391

**Book Title:** You must validate your cart to get access to your VitalSource e-book(s). If needed, instructions are available here - http://apus.libguides.com/bookstore/undergraduate  
**Author:** N/A  
**Publication Info:** N/A  
**ISBN:** N/A

### Required Technology

- See the Technology Requirements section of the undergraduate catalog for the minimum hardware and software requirements.  
- Microsoft Office 365 is available to APUS students for free. To sign up, visit http://products.office.com/en-us/student. If you have questions about accessing the software, please contact Classroom support at classroomsupport@apus.edu.

### Course Guidelines

**Citation and Reference Style**

- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

### Tutoring

- [Tutor.com](http://www.tutor.com) offers online homework help and learning resources by connecting students to certified...
tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

Late Assignments

- Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment.
- Generally speaking, late work may result in a deduction up to 15% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

- Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- “Substantive” means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says “I agree” is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.
- As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.
University Policies

Student Handbook

- Drop/Withdrawal policy
- Extension Requests
- Academic Probation
- Appeals
- Disability Accommodations

The mission of American Public University System is to provide high quality higher education with emphasis on educating the nation's military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.