Introduction to Forest Engineering
FE 101 Syllabus

Instructor: Jim Kiser
Office: Peavy 271
Phone: 737 - 2192
Office Hours: Open
Email: jim.kiser@oregonstate.edu

Course Credits: This course combines approximately 40 hours of instruction and assignments for 2 credits. The course is an introductory course consisting of 2 hours of lecture per week. Lectures will be supplemented by guest speakers for a number of topics and a number of “field” related assignments.

Prerequisite: There are no official prerequisites for the course

Course Format: T Th 10:00 - 10:50 (Stag 161)

Required Text: There are no required texts for the course.

Additional Reading: Readings will be provided to you from time to time

Materials: Handheld scientific calculator – required. Suggest the TI30XA
Transit style field notebook (1)

Personal lockers: Personal lockers are currently not available from the instrument room

Course Goals:
There are two primary goals for this course. The first is to learn some of the key introductory areas of Forest Engineering including Problem Writing, Engineering Ethics, Science Method applied to Engineering, field notes and tools. The second goal is the identification and understanding of the various elements of Forest Engineering careers through representative guest speakers.

Course Objectives:
The course objectives are built around lecture and participation in lecture. Material presented in lecture will focus on the introduction of Forest Engineering topics related to the future program of study in Forest Engineering outlined in the course goals.
Students with Disabilities
Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 737-4098.

Student Veterans
Veterans and active duty military personnel with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor.

Oregon State University policy on Student Conduct
http://oregonstate.edu/studentconduct/code/index.php Students are expected to uphold the Academic Honor Code published by their respective Academic Unit. The code is based on the assumption that all persons must treat one another with dignity and respect in order for scholarship to thrive, (2) Students are also expected to follow the academic and professional standards of the academic units, and (3) Choosing to join the Oregon State University community obligates each member to a code of responsible behavior.

College of Forestry Code of Professional Conduct
http://studentservices.forestry.oregonstate.edu/college-forestry-code-professional-conduct The College of Forestry is a community of faculty, staff, students, and visitors that stretches across all spectrums. Every member of the College community is responsible for conduct that creates, promotes, and maintains a learning and work environment that is open to and welcomes all persons. As a community, we embrace each member through the acknowledgement, honoring, and celebration of our commonalities and our differences.

Blackboard
Blackboard is an on-line virtual classroom. It is a teaching and learning environment, as well as a configurable portal for the OSU community. Blackboard allows instructors to administer tests and quizzes, post grades and lecture notes, and host discussion boards. Through Blackboard, students are able to contact their instructors and classmates, keep a calendar, and maintain an address book. Here is the link for student Blackboard questions…

http://oregonstate.edu/helpdocs/software/blackboard/blackboard-help-students
Course Policies

1. All assignments are due by the time and date assigned.

2. To receive credit, assignments must be turned in on time. Late assignments will not be accepted except by permission of the instructor.

3. All work must be neat, legible, and complete. All steps should be shown. Sample calculations and a summary table may be used to illustrate repetitive calculations. Use words to explain the computations where necessary. Use sketches and drawings where required or helpful. Incomplete, undocumented work is unacceptable.

4. All figures, drawings, and tables should be titled.

5. Any requests for deviations in the course policies, schedule, or deadlines must be made in writing to the instructor. These requests should be made in the form of a typed business style letter that clearly states and defends your request. E-mail is acceptable but should be confirmed as having been received.

Grading:

Final grades for the course will be based on the planned following:

<table>
<thead>
<tr>
<th>Item</th>
<th>Total points</th>
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<tbody>
<tr>
<td>Attendance (19)</td>
<td>70%</td>
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<tr>
<td>Homework (9)</td>
<td>30%</td>
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Letter grades will be based on the following:

<table>
<thead>
<tr>
<th>Letter grade</th>
<th>% of total</th>
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<tbody>
<tr>
<td>A</td>
<td>90</td>
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<tr>
<td>B</td>
<td>80</td>
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<tr>
<td>C</td>
<td>70</td>
</tr>
<tr>
<td>D</td>
<td>60</td>
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<tr>
<td>F</td>
<td>&lt;60</td>
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Plus and minus grades will be given where appropriate.

Example of computing grades. A student attended all but three class lectures and turned in 6 of the 9 assignments

16/19 lectures attended = 84.2%
6/9 assignments completed satisfactorily = 66.7%

Final grade percentage = .842(70) + .667(30) = 78.9% = grade of C
## FE 101 Planned Schedule

| Week 0 9/21 | Lecture: 1 | Class Introduction  
|            |            | Syllabus Review, College Structure  
|            |            | Learning Styles  
|            |            | Becoming a Savvy FE  
|            |            | Keys to success  
|            | Supp. reading: None  
|            | Assignment: None  |

| Week 1 9/26, 9/28 | Lecture: 2-3 | What is Forest Engineering?  
|                   |            | The curriculum and ABET  
|                   |            | Engineering Success and Goals  
|                   |            | Guest Speaker (1)  
|                   |            | Bruce Baldwin – AKS Engineering and Forestry 9/28  
|                   | Supp. reading: 10 Things Engineering Students .. Joel Cuello  
|                   | Assignment: H1 Writing a goal statement  |

| Week 2 10/3, 10/5 | Lecture: 4-5 | Core Values in your Education  
|                   |            | Examples of Core Values  
|                   |            | Writing Solutions  
|                   | Supp. reading: Teaching Core Values... James Coufal  
|                   |            | Writing Professional Homework Papers  
|                   |            | Exercise/Assignment: H2:Developing Core Values (group assignments)  
|                   |            | Exercise/Assignment: H3:Homework Format  |

| Week 3 10/10, 10/12 | Lecture: 6-7 | Observation in Science and Engineering  
|                     |            | Good Notekeeping – Field Notes  
|                     | Supp. reading: The Making of a Scientist – Feynman  
|                     |            | How to develop Sherlock Holmes …  
|                     |            | Exercise/Assignment: H4:Observation Assignment  
|                     |            | Exercise/Assignment: H5: Pacing and field notes Assignment  |
| Week 4          | Lecture: 8-9 | The Scientific Method  
Uncertainty in Science and Engineering  
Guest Speaker (2-3) -Tag team 10/19  
Jill Bell – Weyerhaeuser  
Melissa Bronson – Roseburg Forest Products  
Supplemental reading: Feynman. The Uncertainty of Science  
Exercise/Assignment: H6: Writing assignment on the Feynman paper |
|----------------|-------------|---------------------------------------------------------------------|
| Week 5          | Lecture: 10-11 | Guest Speaker (4)  
Candace Montoya – Washington DNR 10/24  
Guest Speaker (5)  
Alex Dunn – McGee Engineering 10/26  
Supplemental reading: None  
Exercise/Assignment: None |
| Week 6          | Lecture: 12-13 | Quantifying and Understanding Uncertainty  
Elementary Statistics  
Elementary Regression  
Supplemental reading: None  
Exercise/Assignment: H7: Guardrail statistical assessment |
| Week 7          | Lecture: 14-15 | Forest Engineering Tools/Equipment  
Guest Speaker (6)  
Eric Kranzush – Guistina Forestry 11/7  
Supplemental reading: None  
Exercise/Assignment: None |
| Week 8          | Lecture: 15-16 | Guest Speaker (7)  
Wesley Addington – Lone Rock Timber 11/14  
Careers in FE – Surveying  
Supplemental reading: Engineering Ethics (TBA)  
Exercise/Assignment: What is Ethics – Velasquez and others  
Professionalism and Ethics – Chaps 1 through 4 |
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<th>Week 9</th>
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<tbody>
<tr>
<td><strong>11/21, 11/23</strong></td>
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<tr>
<td>Lecture: 17</td>
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<tr>
<td>Supplemental reading: Engineering Licensing – ABET State Licensing</td>
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<td>Thanksgiving Break</td>
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<td><a href="http://www.abet.org">http://www.abet.org</a></td>
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<tr>
<td><strong>11/28, 11/30</strong></td>
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<tr>
<td>Lecture: 18-19</td>
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<td>Suppemental reading: Wrap Up – Careers discussion</td>
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<td>H9: Career discussion project</td>
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<th>Week 11</th>
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<tr>
<td><strong>FINAL EXAM</strong></td>
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**Guest Speaker (7)**
Wes Addington – Lone Rock Timber ???
College of Forestry Structure

Thomas Manness
College Dean

Eric Hansen
WSE Department Head

Claire Montgomery
Ferm Department Head

Troy Hall
FES Department Head

Chelsea Durling
FERM Office Manager

Madison Miller
FERM Office Staff

Erika Hanna
FERM Office Staff

Kellie Cleaver
FERM Student Workers