Fundamentals of Production Engineering  
EML 6324  Section 4005, 7061, 7064  
Class Periods: MWF, 2nd period, 8:30 am-9:20 am  
Location: CSE E107  
Academic Term: Fall 2016

Instructor:  
Hitomi Greenslet  
hitomiy@ufl.edu  
352-392-0812  
Office Hours: MWF, 9:35 am- 10:25 am, MAE-B 226

Teaching Assistants:  
Please contact through the Canvas website  
Daniel Ross  
dross124@ufl.edu  
Office Hours: T, 10:45 am- 12:35 am, NSC 207

Course Description  
Fundamentals of metal cutting, metal forming, and welding. Accuracy and rigidity of machine tools. Automation, numerical control, adaptive control  
Credits: 3

Course Pre-Requisites / Co-Requisites  
Graduate standing

Course Objectives  
The course introduces fundamental manufacturing technologies, explains how products are made, and describes how manufacturing problems are solved. Topics include engineering materials, manufacturing processes, machine tools, and automation.  
Upon completion of this course, students will be able to demonstrate the following:  
- an understanding of traditional and advanced manufacturing processes  
- the ability to use engineering tools such as advanced mathematics and the theories of stress and strain, and vibrations to analyze manufacturing processes and machines  
- the ability to rapidly and accurately perform manufacturing engineering evaluations and analyses  
- the ability to survey, understand, and present advanced knowledge and information following the current trends in manufacturing)

Materials and Supply Fees  
N/A

Required Textbooks and Software  
Manufacturing Processes and Equipment  
George Tlusty  
Prentice-Hall, 2000  
ISBN 0-201-49865-0

Recommended Materials  

- Journals including ASME Journal of Manufacturing Science and Engineering, Annals of the CIRP, Precision Engineering, etc.

Course Schedule
See the attached course schedule. *(Dates are subject to change—this is to serve as a guideline only)*

Attendance Policy, Class Expectations, and Make-Up Policy

**Class policies**

- Attendance is expected and encouraged for all students, but it will only be recorded for on-campus students. If you need to miss a class, please make appropriate arrangements with a classmate for class notes.
- Cheating or any other form of academic dishonesty will result in failure and prosecution according to University policies.
- Students are expected to conduct themselves in a manner that does not interfere with other students’ learning. Disruptive or distracting behavior is prohibited, and Prof. Greenslet reserves the right to temporarily or permanently dismiss distracting students from the classroom.
- Students are responsible for all announcements, assignments, etc., made during lectures, including changes in the scheduling of lecture topics, homework assignments, and exams. Class absence is not a valid excuse for being unprepared.
- Any changes in the schedule or assignments will be communicated to the class via e-mail using your Gatorlink (@ufl.edu) e-mail address and the course website. You are responsible for monitoring your mailbox and the website regularly for any class notices.

**Homework policies**

[On-campus students] Homework must be turned in at the start of class on the due date. You have the option to turn it in earlier, in which case it must be placed in Prof. Greenslet’s mailbox (located in 221 MAE-B) before 5:00 PM on the day before the due date. *(Do NOT slip it under Prof. Greenslet’s door.)* In general, late homework will not be accepted.

[Off-campus students] Homework must be submitted by e-mail through the UF e-learning system by 8:30 AM on the due date. In general, late homework will not be accepted.

- Homework must be neat and legible and show all major steps.
- Homework must be on 8.5” x 11” paper. Multiple sheets must be stapled in the proper order. Homework must have the assignment number, your name, and the date of submission in the upper right-hand corner of the first sheet.
- Homework must have the page number in the bottom right corner of every page.
- You may discuss the homework with your classmates. However, every student must provide the solutions themselves. Copying of homework will be treated as academic dishonesty. Use of a solution manual or any online answer source is also considered dishonesty.

**Exam policies**

[On-campus students] The final exam will be held at the time assigned by the Registrar (10:00 AM–12:00 PM on Friday, December 16, 2016). All exams will be held in the regular classroom. The first exam will be held during the regular class period.

[Off-campus students] All exams will follow UF EDGE regulations.

- It is the students’ responsibility to demonstrate their knowledge on exams. In order to be able to grade your work, it must be neat, be legible, and follow logical steps with all work shown. Partial credit may be given for work that can be followed and where the nature and magnitude of the mistake can be identified. No credit will be given for correct answers with insufficient indication of how they were obtained.
- Students should be aware that their work is submitted under the honor code pledge taken by UF students. The pledge reads: *On my honor, I have neither given nor received unauthorized aid in doing this assignment.*
Students can learn more about the UF honor code at the UF Student Government website. (http://www.dso.ufl.edu/sccr/honorcodes/honorcodedesk.php)

**Project (written report and presentation) policies**

**Written report:**

[On-campus students] Each team of four students must choose a subject relevant to traditional manufacturing processes, survey the related literature, and summarize the chosen processes.

[Off-campus students] Each student must choose a subject relevant to traditional manufacturing processes, survey the related literature, and summarize the chosen processes

- The report must be on 8.5” x 11” paper.
- Use the given template and follow the guidelines described in the template. The report must have the page number on the bottom right corner of every page.
- The report must have the date of submission in the upper right hand corner of the first sheet.
- The report must include the title, your name, abstract, introduction, main body of the report, conclusions, and at least ten (10) references.
- The report must be no longer than five (5) pages overall.
- The project progress will be checked step by step: (1) title and abstract, (2) introduction and outline, and (3) list of references. Each document (PDF file) must be submitted by e-mail through the UF e-learning system by 8:30 AM on the due date. In general, late submissions will not be accepted.
- The complete final report (PDF file) must be submitted by e-mail through the UF e-learning system by 8:30 AM on the due date. In general, late submissions will not be accepted.
- **Plagiarism is not acceptable.** To learn how to prevent misconduct related to plagiarism, refer to http://web.uflib.ufl.edu/msl/07b/studentplagiarism.html.

**Written presentation:**

- Presentation must be prepared on PowerPoint slides (8.5” x 11” size).
- Presentation must include the title, your name, main body of the presentation, date of submission, and page number.
- Presentation must indicate sources as needed.
- **Plagiarism is not acceptable.** To learn how to prevent misconduct related to plagiarism, refer to http://web.uflib.ufl.edu/msl/07b/studentplagiarism.html.
- The presentation slides must be submitted by e-mail through the UF e-learning system by 8:30 AM on the due date. In general, late submissions will not be accepted.

**Oral presentation (On-campus students only):**

- Use PowerPoint slides (8.5” x 11” size).
- Each group must give a 15-minute presentation in class. The presentation schedule will be determined later.

**Feedback on project reports and presentation policies**

- Each student must choose a project by other students and write comments and suggestions about it.
- Feedback must be on a single 8.5” x 11” page.
- Feedback must have the date of submission in the upper right-hand corner of the sheet.
- Feedback must include the project title you chose and your name.
- Use 10 pt. black Arial font.
- Use single space between lines.
- Use top, bottom, right, and left margins of 25.4 mm.
- Feedback must be submitted by e-mail through the UF e-learning system by 8:30 AM on the due date. In general, late submissions will not be accepted.
### Evaluation of Grades

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Total Points</th>
<th>Percentage of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Sets (6)</td>
<td>1.6-1.7 each</td>
<td>10%</td>
</tr>
<tr>
<td>Project (report, presentation)</td>
<td>15 each</td>
<td>30%</td>
</tr>
<tr>
<td>Project feedback</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>25</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

### Grading Policy

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.4 - 100</td>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>90.0 - 93.3</td>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>86.7 - 89.9</td>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>83.4 - 86.6</td>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>80.0 - 83.3</td>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>76.7 - 79.9</td>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>73.4 - 76.6</td>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>70.0 - 73.3</td>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>66.7 - 69.9</td>
<td>D+</td>
<td>1.33</td>
</tr>
<tr>
<td>63.4 - 66.6</td>
<td>D</td>
<td>1.00</td>
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<tr>
<td>60.0 - 63.3</td>
<td>D-</td>
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<tr>
<td>0 - 59.9</td>
<td>E</td>
<td>0.00</td>
</tr>
</tbody>
</table>

More information on UF grading policy may be found at: [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

### Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [https://www.dso.ufl.edu/drc](https://www.dso.ufl.edu/drc)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at [https://evaluations.ufl.edu/evals](https://evaluations.ufl.edu/evals). Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at [https://evaluations.ufl.edu/results/](https://evaluations.ufl.edu/results/).

### University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code ([https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/](https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/)) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.
**Campus Resources:**

*Health and Wellness*

- **U Matter, We Care:** If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

- **Counseling and Wellness Center:** [http://www.counseling.ufl.edu/cwc](http://www.counseling.ufl.edu/cwc), and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

- **Sexual Assault Recovery Services (SARS)**
  Student Health Care Center, 392-1161.

- **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or [http://www.police.ufl.edu/](http://www.police.ufl.edu/).

**Academic Resources**

- **E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. [https://lss.at.ufl.edu/help.shtml](https://lss.at.ufl.edu/help.shtml).


- **Library Support**, [http://cms.uflib.ufl.edu/ask](http://cms.uflib.ufl.edu/ask). Various ways to receive assistance with respect to using the libraries or finding resources.

- **Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. [https://teachingcenter.ufl.edu/](https://teachingcenter.ufl.edu/).

- **Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers. [https://writing.ufl.edu/writing-studio/](https://writing.ufl.edu/writing-studio/).
