ENES 115: Flexus Seminar I  
Section 0201  
Fall 2012  
Tuesday 4-5:30 pm  
EAS 1119 (unless otherwise noted on schedule)

Instructor Information
INSTRUCTORS:  Dr. Paige Smith  
Candice Staples  
OFFICE:  1131 Martin Hall (Mon-Thurs)  
0110 Easton Hall (Fri)  
0110 Easton Hall (Tues-Thurs)  
OFFICE HOURS:  1:00-2:00 pm Friday  
or by appointment  
11am – 2:00 pm Wed (Easton)  
10am – 12:00 pm Thurs (Easton)  
OFFICE PHONE:  301.405.3931  
x59434  
EMAIL:  pesmith@umd.edu  
cstaples@umd.edu

TEACHING ASSISTANTS:  TBA  
EMAIL:  TBA  
OFFICE HOURS:  TBA

Course Description
This course is designed to assist you in becoming a successful student in engineering. You will be provided with information that will assist your success personally, academically and professionally. This course will focus on:

1. Enhancing professional and personal development  
2. Developing self-confidence and self-efficacy in academic and technical ability  
3. Identifying and employing strategies and skills for academic and professional success  
4. Developing career commitment through networking, mentoring, and role models

Course Objectives
Flexus, specifically through this seminar, centers on the following learning outcomes. With successful completion of this course:

1. Students will expand upon their decision to major in engineering at UMD by exploring career possibilities, personal preferences, and academic expectations.  
2. Students will improve skills essential to the study of engineering through training in group processes, interpersonal communication, and UMD technology competency.  
3. Students will increase their awareness of campus resources and support services, including  
   • Academic support services,  
   • The Women in Engineering Program, Society for Women Engineers and other student organizations addressing gender issues,  
   • Personal and social support services.  
4. Students will increase their awareness of issues related to women in the field of engineering by  
   • Sharing stories and engaging in conversations with science and engineering role models regarding their personal experiences in academia and industry,  
   • Exploring personal learning preferences and ways of knowing,  
   • Examining their values regarding particular college issues, such as safety, health, personal and social identity, “chilly climates” and social connection.  
5. Students will synthesize and apply new knowledge and skills through individual reflection and group activities.
Course Policies

Attendance
Regular attendance and participation in this class is the best way to grasp the concepts and principles being discussed. However, in the event that a class must be missed due to an illness, the policy in this class is as follows:

1. For every medically necessary absence from class (lecture, recitation, or lab), a reasonable effort should be made to notify the instructor in advance of the class. When returning to class, students must bring a note identifying the date of and reason for the absence, and acknowledging that the information in the note is accurate.
2. If a student is absent more than 3 time(s), the instructor may require documentation signed by a health care professional.
3. If a student is absent on days when tests are scheduled or papers are due [or other such events as specified in the syllabus] he or she is required to notify the instructor in advance, and upon returning to class, bring documentation of the illness, signed by a health care professional.

Cell Phones & Laptops
All cell phones and laptops should be in the “silent” mode and should not be visible during class. Points may be deducted from the professional grade for repeated offenders.

Missed/Late Assignments
Students are expected to turn in all assignments, journals, papers and projects at the beginning of the class on the date due or it will be considered late. If you plan to miss a class, it is your responsibility to turn in the assignment before the class in person (i.e., during office hours or an alternate arranged time). There will be a 10% point deduction from the assignment for each day it is late.

Academic Integrity
The University of Maryland has a nationally recognized Honor Code, administered by the Student Honor Council. This code sets standards for academic integrity for all undergraduate and graduate students, and you are responsible for upholding these standards in this course. It is very important for you to be aware of the consequences for cheating, fabrication, facilitation, and plagiarism. For more information visit: http://www.shc.umd.edu.

Students who engage in academic dishonesty in this course will receive no points for the assignment, and will be reported to the Honor Council and Office of Judicial Programs for further action. There will be no warnings. Remember, it is never worth it!

Religious Observances
Absence due to religious observance will not be penalized. However, it is the student’s responsibility to notify the instructors within the first three weeks of class regarding any absence(s) for the entire semester.

Persons with Disabilities
Students with a documented disability should inform the instructors as soon as possible if academic accommodations are needed. Accommodations for individuals with disabilities can be arranged through the Disability Support Service (DSS), a division of the University Counseling Center. Please call 301.314.7682, e-mail dissup@umd.edu, or visit Susquehanna Hall for more information.

Multicultural Statement
The instructors of this course are committed to creating an open and accepting environment in which diversity, opinions, unique perspectives, and others’ worldviews are respected.
Special Accommodations
Any student with special needs or circumstances (work conflicts with outside activities, personal issues, etc.) should feel free to meet with the course instructors during office hours to discuss accommodations and/or special circumstances.

Evaluation Process
A total of 1000 points will be allocated as follows:

<table>
<thead>
<tr>
<th>Coursework</th>
<th>Maximum Points</th>
<th>Total Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal Statements</td>
<td>50 points</td>
<td>50 points</td>
</tr>
<tr>
<td>Strong Interest Inventory</td>
<td>50 points</td>
<td>50 points</td>
</tr>
<tr>
<td>First Look Fair</td>
<td>50 points</td>
<td>50 points</td>
</tr>
<tr>
<td>Four Year Plan</td>
<td>25 points</td>
<td>25 points</td>
</tr>
<tr>
<td>Career Interest Paper</td>
<td>125 points</td>
<td>125 points</td>
</tr>
<tr>
<td>Service Outreach</td>
<td>150 points <em>(EC of 25 points)</em></td>
<td>150 points</td>
</tr>
<tr>
<td>Journal Entries</td>
<td>3 @ 25 points</td>
<td>75 points</td>
</tr>
<tr>
<td>MDSE Project-Preliminary Design Report</td>
<td>40 points</td>
<td>40 points</td>
</tr>
<tr>
<td>MDSE Project-Bibliography</td>
<td>10 points</td>
<td>10 points</td>
</tr>
<tr>
<td>MDSE Project- Preliminary Design Presentation</td>
<td>125 points</td>
<td>125 points</td>
</tr>
<tr>
<td>MDSE Project-Final Presentation</td>
<td>200 points</td>
<td>200 points</td>
</tr>
<tr>
<td>Participation/Professionalism</td>
<td>100 points</td>
<td>100 points</td>
</tr>
<tr>
<td><strong>TOTAL POINTS POSSIBLE</strong></td>
<td><strong>--</strong></td>
<td><strong>1000 points</strong></td>
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*Extra Credit (EC) of up to 25 points will be awarded for participating in service outreach for more than 4 hours.

Grading Scale
In order to pass this class, all assignments must be completed. The following grading scale will be used:

- 900 – >1000    A
- 800 – 899      B
- 700 – 799      C
- 600 – 699      D
- <599           F

Evaluation Criteria
Goal Statements
You will develop short term, long term, and career goal statements during the in-class activity to turn in. If not finished during class, it is due in class on Tuesday, September 11.

Strong Interest Inventory
The Strong Interest Inventory is a career interest assessment that will be distributed in class. It is to be completed at home, and is due in class on Tuesday, September 11.

First Look Fair
Involvement in student organizations is an important aspect of being a well-rounded UMD student. You are to attend the First Look Fair which will be held on September 12th and 13th from 10 am - 3 pm. Visit at least five student organizations that are of interest, and record the name of the organization and contact information to turn in. Due in class on Tuesday, September 18
Career Interest/Strong Interest Inventory Reaction Paper
This is a paper based on your Strong Interest Inventory results and interpretation as discussed in class. The purpose of this paper is to apply your results and interpretation to your personal career exploration and development.

First, discuss your current career goals. Second, discuss your results and interpretation of the Strong and how well you think it matches your career goals. Include all of the following: the area of engineering in which you are interested and why; based on what you know about yourself, describe your ideal job; if you plan to continue your education after your bachelor’s degree and why; if there any other options you are considering; what opportunities you can take advantage of in the Clark School to help you achieve your goals; what obstacles you might face in reaching your goals and how you can prepare yourself to deal with these obstacles; and what is likely to change about these goals over the next few years. Length: 2-3 pages.

This is due in the elms drop box by the start of class on Tuesday, October 16.

Four-Year Plan
Completing a four-year plan encourages graduating on time, assists in class scheduling and is important in keeping students on track. For our class session with an academic advisor, you will complete your four-year plan at home and turn it in during that class.

**Use your major’s four year plan template (found at www.eng.umd.edu/advising) under “Four Year Plans” to create your own four year plan based upon your AP/IB/college credits and current enrollment. Print and bring your Four Year Plan to class on October 23rd.**

Journal Entries
Journals are an expression of your feelings and reactions to academic and social experiences. You will be required to submit four journal entries electronically on Blackboard. Each journal is due by 4pm on Tuesdays, and specific topics will be posted on Blackboard the week before they are due. Length: approximately one page double-spaced.

Service Outreach
Service outreach is part of the “beyond the classroom” experience necessary to develop well-rounded engineering students. Mentoring and role modeling experiences have been shown to enhance self-confidence and self-efficacy with respect to engineering. You are required to attend one service outreach activity at any time throughout the semester. Two opportunities through WIE are:

1. Girl Scout Engineering Saturday – Saturday, October 13, 2012, 9:00 am – 1:30 pm
2. Keys To Empowering Youth (KEYS) – Saturday, November 10, 2012, 9:00 am – 3:00 pm.

Please let Elizabeth Remmers know if you are planning to volunteer for one of the events above and state that you are in Flexus as soon as possible at eremmers@umd.edu. Note: there are limited openings for Flexus volunteers, and all volunteers for these activities are expected to have an interest in working with a middle school age-group, be enthusiastic and make sure the students are engaged.

An opportunity available through the Office of Undergraduate Recruitment is:

3. Engineering Your Future – Saturday, November 17, 2012, 8:00 am – 2:00 pm (times subject to change).

Email Tykeia Robinson at tykeianr@umd.edu with the times in which you are able to volunteer. Please note that this event will involve working with high school students considering engineering, so it is important for volunteers to have enthusiasm.
Other opportunities may be found at: http://www.csl.umd.edu/resources/UMserves/index.htm. Please note that the service outreach activity you choose must relate in some way to engineering!

With 4 hours of service you will earn the full 150 points available; however, up to 25 extra credit points are possible if you serve for more than four hours. After attending the service outreach activity, you must email Candice with the name of the event, the coordinator’s name and email address, and the date and hours you worked. You will not be given credit for this assignment unless you email this information. This must be completed by November 20, 2012.

MDSE Project
You will work in small teams (4-5 members) to present a solution to an engineering problem to the University of Maryland ‘Maryland Sustainability Engineering’ chapter. This presentation will be the culmination of a semester’s worth of work with your teammates. You will first complete a preliminary report, then complete a preliminary presentation, receive feedback and complete a final presentation at the end of the term.

1. MDSE Project-Bibliography (DUE: 10/10) should include a minimum of three sources. Please utilize the Research Port presentation and information available on ELMS to help guide you in your research and creation of your bibliography.

One team bibliography should be turned in per group to the Virtus instructor on the date due.

2. MDSE Preliminary Report (DUE: 10/10) will be a two page paper and possible brief meeting with the instructor. The paper should address the following:
   a. What research has your team completed?
   b. What was each team member’s role?
   c. How often have you met together as a team?
   d. Has everyone attended team meetings? Be specific.
   e. What questions do you have for the MDSE mentors that will help you better present a solution to this engineering problem?
   f. Include with your paper submission a preliminary outline of your Power Point Presentation

One team paper should be turned in per group to the Virtus instructor on the date due.

3. MDSE Preliminary presentation (DUE: Week of 10/29) will be a presentation. Logistical details will be provided to you closer to the due date.

4. MDSE Project- Final Presentation (DUE: Week of 11/26). Further details will be provided to you closer to the due date.

Participation/Professionalism
1. This course will be interactive, combining lecture, reading, discussion, and activities. Please come prepared to each class. Active participation is highly valued. Discussions of your personal experiences and opinions are important. You are encouraged to make suggestions about your needs as a first-year student, and to share ideas that you believe may make the class more conducive to your learning style. There will be periodic evaluations of the class content and you are strongly encouraged to comment honestly.

2. Professionalism entails coming to class on time, being attentive in class (vs. sleeping), completing individual assignments, and being respectful of your instructors, guest speakers, and other class members. Treating others with respect includes respecting diverse opinions, paying attention, listening when others are speaking, and allowing everyone a chance to voice opinions and comments. Confidentiality is expected as personal experiences and opinions will be shared often.
**Course Schedule**

*Please note that this schedule is tentative and the instructors may alter it as needed. Any changes will be announced in class or via e-mail. Please check your email at least once a day!*

<table>
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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment</th>
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</table>
| 1    | 9/4   | Syllabus Overview, Community Expectations and Guidelines, Icebreakers, Entrance Survey (4-4:45)  

  Goal Setting Exercise  

  Distribute Strong Interest Inventory |                                                                  |
| 2    | 9/11  | 4-4:45 I’m a Maryland Student, Now What?  

  Donna Lim, Student Activities, Stamp Student Union  

  4:45-5:30 Sustainability  

  Mark Stewart, Senior Project Manager, Office of Sustainability | Journal #1  

  Goal Statements  

  Strong Interest Inventory |
| 3    | 9/18  | Spatial Visualization  

  Meet in 1215 JMP | First Look Fair Assignment |
| 4    | 9/25  | 4-4:45 Student Panel  

  4:45-5:30 Introduction to Sustainability Project | |
| 5    | 10/2  | Effective Research (4:00-4:20)  

  Bruk Berhane  

  Engineering Drawing  

  Meet in 1215 JMP | Journal #2  

  MDSE Project – Preliminary Report (one copy per team, due Wednesday, 10/10, in Virtus class) |
| 6    | 10/9  | 4-4:45 Strong Interest Inventory Interpretation & ONET Career Session  

  Deb Vidmar, Assistant Director, Engineering Co-op & Career Services  

  4:45-5:30 More About Me  

  Meet in 1215 JMP | |
| 7    | 10/16 | 4-5 Time Management  

  Beverly Greenfeig, Learning Assistance Service  

  5-5:30 Learning about Learning | Career Interest Paper |
| 8    | 10/23 | Four-Year Plan, Schedule Planning, & Meet with an Advisor  

  Nicole Hollywood, Engineering Advising & Academic Support | Four Year Plan |
| 9    | 10/30 | MDSE Project Preliminary Design Presentation | MDSE Project Preliminary Design Presentation |
| 10   | 11/6  | Safety & Self Defense  

  Networking Overview | |
| 11   | 11/13 | Networking Event  

  Meet in 2460 AV Williams | Journal #3 |
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<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>12</td>
<td>11/20</td>
<td>4-4:45 Learning Styles</td>
<td>Service Outreach</td>
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<tr>
<td></td>
<td></td>
<td>4:45-5 Visualization</td>
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<td></td>
<td></td>
<td>Meet in 1215 JMP</td>
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<tr>
<td>13</td>
<td>11/27</td>
<td>MDSE Project Final Presentations</td>
<td>MDSE Project Final Presentations</td>
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<tr>
<td>14</td>
<td>12/4</td>
<td>Review for ENES102 final</td>
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<tr>
<td>15</td>
<td>12/11</td>
<td>Closing, Course Evaluations</td>
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<td>Meet in 1215 JMP</td>
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