ENES 215: Flexus Seminar III  
Fall 2012  
Thursday 4:00 – 5:15 pm  
EGR 1108

Instructor Information
INSTRUCTORS: Dr. Paige Smith    Candice Staples
OFFICE: 1131 Martin Hall (Mon-Thurs)  1131 Martin Hall (Fri)  0110 Easton Hall (Fri)   0110 Easton Hall (Tues-Th)
OFFICE HOURS: 1:00-2:00 pm Fridays  10:00 am – noon Tu Easton or by appointment  1:00 – 3:00 pm Th (Easton)
OFFICE PHONE: 301.405.3931     x59434
EMAIL: pesmith@umd.edu  cstaples@umd.edu

Course Description
This course is designed to assist you as you continue your path to becoming a successful and well-rounded engineer. You will be provided with information that will assist your success both 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, and encouraging self-awareness
3. Identifying and employing strategies and skills for academic and professional success
4. Developing career commitment through networking, mentoring, and role models
5. Developing awareness of issues of diversity, specifically gender diversity

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.
2. Students will enhance their understanding of the social relevance of engineering through research activities that apply classroom learning to social, environmental, and technical needs.
3. Students will improve skills essential to the study of engineering through practice in group processes and interpersonal communication.
4. Students will continue to increase their awareness of campus resources and support services.
5. 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 diversity and multiculturalism,
   • Examining their values regarding particular multicultural and gender-related issues.
6. Students will synthesize and apply new knowledge and skills through directed self-reflection and group activities.
Readings
Reading Set #1:
Signature Theme Report & Strengths Insight and Action-Planning Guide (information will be emailed to you or posted on blackboard)

Reading Set #2:
Women’s leadership in STEM – Barriers to Participation (posted in Blackboard)

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 professionalism 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). 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>25 points</td>
<td>25 points</td>
</tr>
<tr>
<td>Plan for Academic Success</td>
<td>25 points</td>
<td>25 points</td>
</tr>
<tr>
<td>Autobiography Paper</td>
<td>125 points</td>
<td>125 points</td>
</tr>
<tr>
<td>Strengths Quest</td>
<td>100 points</td>
<td>100 points</td>
</tr>
<tr>
<td>Interview Paper</td>
<td>150 points</td>
<td>125 points</td>
</tr>
<tr>
<td>Multicultural Challenge</td>
<td>100 points</td>
<td>100 points</td>
</tr>
<tr>
<td>Service Outreach</td>
<td>100 points</td>
<td>100 points (EC of 25 points)*</td>
</tr>
<tr>
<td>Journal Entries</td>
<td>3 @ 25 points</td>
<td>75 points</td>
</tr>
<tr>
<td>Final Outreach 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>--</td>
<td><strong>1000 points</strong></td>
</tr>
</tbody>
</table>

*Extra Credit (EC) of up to 25 points will be awarded to those who participate in service 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. This is due on September 6 at the beginning of class.

Plan for Academic Success
Completing an Academic Success Plan is important for time management and being a successful student. This is due on September 6 at the beginning of class.

Autobiography Paper
It is vital to know oneself and one’s formative influences before leading and influencing others. Write a 3-5 page, double spaced, autobiography that reflects on the following:

• People who have influenced your growth, development and identity (e.g. mentors, friends, role models, family)

• Causes for which you have passion and/or experience

• Beliefs, values, and passions that inform your action and that ground you

• Key transformative experiences

• Personal qualities that define you

• Obstacles and challenges that you have confronted or encountered

The paper is due on September 27th. You will share your reflections and experiences and compare them to your peers’ experiences during class discussion.

Strengths Quest
More information will be provided to you via email or posted on blackboard. Due: October 4th.

Multicultural Challenge
Diversity and multiculturalism is a cornerstone of UMD and an important focus of our program and class. Attend one event or lecture presented by a student group or campus office that focuses on a topic of diversity or multiculturalism. For example, the Black Student Union, the Muslim Student Association, the Asian Student Union, and the Latino Student Union are student groups that host a number of these events throughout the semester. The Diamondback or the Stamp Student Union website will be helpful in your search. Submit a 1/2-page reaction summarizing your experience and your reactions to how it felt to attend such an event. Note: This event is intended to help you step outside of your “comfort zone.” You should attend an event hosted by a group that is different from a group with which you identify. Due: November 8.

Interview Paper
Write a 4-5 page paper (double spaced) that reports the findings of a series of three interviews you will conduct over the course of the early semester. Using the constructs of “Predecessor,” “Instigator,” and “Inheritor,” you will be asked to select people from your own family and/or mentoring life that serve those roles in your life (Astin & Leland, 1991). For instance, you might choose a grandmother or a historical figure as a predecessor (secondary influence) and a mother or older sister as an instigator (primary influence) and someone who has “come after you” or whom you are mentoring as an inheritor (your influence on another). Interview these three individuals to discover their personal narrative and their understanding of leadership. You may wish to use the same concepts and/or questions from your autobiography in your interviews.

This assignment is due on November 15. During class on November 29th, you will discuss your on your
interviews. You may want to reflect on how the individuals you interviewed have been formative in your own personal and leadership development. You may also want to share the lessons learned in completing this assignment.

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://thestamp.umd.edu/student_involvement/lcsl. 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 21, 2012.

Journal Entries
Journals are an expression of your thoughts and reactions to academic and social experiences. You will be required to submit four journal entries electronically on Blackboard. Each journal is due by 4:00pm on Thursdays, and specific topics will be posted on Blackboard the week before they are due. Length: approximately one page double-spaced. Due: September 13, October 18 and December 6.
Final Outreach Presentation
One way to extend your engineering experience and give back to the community is to share your knowledge with others. You have already volunteered to help younger women, and many of you serve as informal role models to the freshmen Flexus members. Now, we would like you to provide one opportunity for young women (and men) in your home school (grades 6-12) to learn from you about engineering and UMD in a more structured setting. Flexus will provide support by preparing you with a training session and a practice run-through of your presentation. You will present information about UMD, the Clark School, what engineering is, different types of engineering, why engineering is important, and what engineers do. More information will be provided in first class. You will present in pairs. Regardless of when you present, presentations must be emailed to pesmith@umd.edu by 12 pm on November 29th. Save the presentation as the names of both presenters.

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.
### Tentative Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment (Due for class)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/30</td>
<td>Syllabus&lt;br&gt;Goal Setting Activity&lt;br&gt;Plan for Academic Success&lt;br&gt;Final Outreach Presentation Overview&lt;br&gt;Entrance Survey</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9/6</td>
<td>Introduction to Leadership</td>
<td>Goal Statements, Plan for Academic Success</td>
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<tr>
<td>3</td>
<td>9/13</td>
<td>Arduino&lt;br&gt;Dr. Mel Gomez, Electrical &amp; Computer Engineering&lt;br&gt;<strong>Location: TBA</strong></td>
<td>Journal #1</td>
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<tr>
<td>5</td>
<td>9/20</td>
<td>No Class</td>
<td></td>
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<tr>
<td>4</td>
<td>9/27</td>
<td>Autobiography Discussion</td>
<td>Autobiography Paper</td>
</tr>
<tr>
<td>6</td>
<td>10/4</td>
<td>Leadership Strengths Quest – Part I&lt;br&gt;Jane Fines &amp; Ramsey Jabaji, International &amp; Leadership Programs</td>
<td>Reading #1&lt;br&gt;Complete on-line Strengths Quest</td>
</tr>
<tr>
<td>7</td>
<td>10/11</td>
<td>Leadership Strengths Quest – Part II&lt;br&gt;Jane Fines &amp; Ramsey Jabaji, International &amp; Leadership Programs</td>
<td></td>
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<tr>
<td>8</td>
<td>10/18</td>
<td>No Class</td>
<td>Journal #2</td>
</tr>
<tr>
<td>9</td>
<td>10/25</td>
<td>Engineering Design&lt;br&gt;Dr. Guangming Zhang, Mechanical Engineering&lt;br&gt;<strong>Location: 1215 JM Patterson</strong></td>
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<tr>
<td>10</td>
<td>11/1</td>
<td>Women &amp; Leadership</td>
<td>Reading #2</td>
</tr>
<tr>
<td>11</td>
<td>11/8</td>
<td>No Class</td>
<td>Multicultural Challenge</td>
</tr>
<tr>
<td>12</td>
<td>11/15</td>
<td>Networking Event</td>
<td>Interview Paper</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Location: 2460 AV Williams</strong></td>
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<tr>
<td>13</td>
<td>11/22</td>
<td>No Class</td>
<td>Service Outreach (due 11/21)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Happy Thanksgiving! 😊</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>11/29</td>
<td>Outreach Presentations&lt;br&gt;Interview Paper Discussion</td>
<td>All Final Presentations due</td>
</tr>
<tr>
<td>15</td>
<td>12/6</td>
<td>Outreach Presentations</td>
<td>Journal #3</td>
</tr>
</tbody>
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1. These assignments were developed by Dr. Marsha Guenzler-Stevens and Katie Hershey for EDCP 418G: Special Topics in Leadership: Women’s Leadership in Spring 2008 and are used with their permission.