Internship Experience in Biomedical Engineering  
BME 3941  
**Class Periods:** N/A  
**Location:** N/A  
**Academic Term:** Summer 2018

**Instructor:**  
Dr. Sarah Rowlinson  
sarah.rowlinson@bme.ufl.edu  
(352) 273-9333  
Office Hours: Email for appointment, J299 Biomedical Sciences Building

**Course Description**  
0-3 credits repeatable. Engineering work experience under the supervision of an engineer. (S-U)

**Course Pre-Requisites / Co-Requisites**  
None

**Course Objectives**  
Part-time or full-time engineering work experience to allow students the opportunity to receive technical elective credit toward their degree while being able to gain practical engineering skills.

**Materials and Supply Fees**  
None

**Professional Component (ABET):**  
N/A

**Relation to Program Outcomes (ABET):**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Coverage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Apply knowledge</td>
<td>high</td>
</tr>
<tr>
<td>b1. Conduct experiments</td>
<td>medium</td>
</tr>
<tr>
<td>b2. Statistical design of experiments</td>
<td></td>
</tr>
<tr>
<td>c. Design</td>
<td>low</td>
</tr>
<tr>
<td>d. Function on teams</td>
<td>medium</td>
</tr>
<tr>
<td>e. Solve problems</td>
<td>low</td>
</tr>
<tr>
<td>f. Professional and ethical responsibility</td>
<td>high</td>
</tr>
<tr>
<td>g. Communicate</td>
<td>high</td>
</tr>
<tr>
<td>h1. Economic impact</td>
<td>low</td>
</tr>
<tr>
<td>h2. Global, societal, and environmental impact</td>
<td>medium</td>
</tr>
<tr>
<td>i. Lifelong learning</td>
<td>medium</td>
</tr>
<tr>
<td>j. Contemporary issues</td>
<td>high</td>
</tr>
<tr>
<td>k. Techniques, skills, and tools for degree program</td>
<td>high</td>
</tr>
</tbody>
</table>

*Coverage is given as high, medium, or low. An empty box indicates that this outcome is not part of the course.

**Required Textbooks and Software**  
None

**Recommended Materials**  
None
**Attendance Policy, Class Expectations, and Make-Up Policy**

Excused absences are consistent with university policies in the undergraduate catalog [https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx) and require appropriate documentation.

**Expectations**

The student will maintain appropriate working hours as determined by her/his supervisor and maintain regular contact with the BME Department Undergraduate Coordinator or BME Department designee.

BME 3941: Internship in Biomedical Engineering is a variable credit course that may be applied toward the technical electives requirement for the BME undergraduate degree. Students may register for BME 3941 for a maximum of three credits. It may only be taken S/U (Satisfactory/Unsatisfactory). Registration for the course is handled through BME Academic Office.

To register for Internship Experience in Biomedical Engineering, a formal letter from the sponsoring company describing the nature of the internship must be on file in BME Academic Office before the end of the registration drop/add period. The letter must indicate (1) the approximate number of hours per week that the student will be working over the term of the semester, (2) that the internship is biomedical engineering related, (3) provide a description of the student’s responsibilities, (4) provide detailed contact information of the person or persons who will be supervising the student during the internship, and (5) the start and end dates of the internship. The letter must be attached to the Student Registration Request form (available in the BME Academic Office).

The number of credits assigned for this course is determined of the number of hours the student works per week during the internship and total number of hours completed over the course of the term.

- **Summer A or B term (at least 6 weeks in length):**
  - 1 credit = 20 hours per week (120 hours of work total)
  - 2 credits = 40 hours per week (240 hours of work total)

- **Summer C term (at least 12 weeks in length):**
  - 1 credit = 10 hours per week (120 hours of work total)
  - 2 credits = 20 hours per week (240 hours of work total)
  - 3 credits = 30 hours per week (360 hours of work total)

- **Fall/Spring terms (at least 15 weeks in length):**
  - 1 credit = 8 hours per week (120 hours of work total)
  - 2 credits = 16 hours per week (240 hours of work total)
  - 3 credits = 24 hours per week (360 hours of work total)

**Evaluation of Grade**

The grade for this internship (S or U) will be determined by the BME Department Undergraduate Coordinator or BME Department designee. In order to receive a grade of Satisfactory (S), a 2-4 page Post-Internship Report written by the student and the Employer Evaluation completed by the student’s supervisor(s) must be submitted to the BME Academic Office no later than the last day of class during the term in which the internship is completed. The Post-Internship Report is the student’s self-assessment of knowledge and skills learned while participating in the internship and a summary of the roles and responsibilities assumed during this time. The Employer Evaluation includes a review of the student’s work during the internship to evaluate whether or not the student has satisfactorily completed the internship and detailed contact information of the person or persons who have supervised and evaluated the student’s performance. The grade will be based on: (1) the quality of the Post-Internship Report, (2) the scope of the internship project, and (3) the Employer Evaluation.

The following grading system will be used:

- Post Internship Report:
  - 0 = Report DOES NOT clearly express knowledge/skills learned (e.g. lacks sufficient detail or poor presentation or excessive grammatical errors)
1 = Report DOES clearly express knowledge/skills learned (e.g. sufficient detail and effective presentation and minimal grammatical errors)

Scope of Project:
0 = Project deemed trivial and not representative of credit hours enrolled
1 = Project demonstrates a substantive level of work commensurate with credit hours enrolled

Employer evaluation:
0 = Student DID NOT perform at a satisfactory level (e.g. was not present and working the specified hours/week)
1 = Student DID perform at a satisfactory level (e.g. was present and working the specified hours/week)

A score of 1 for each of the three grading categories is required to receive a course grade of Satisfactory (S).

If the Post-Internship Report and Employer Evaluation are not submitted by the deadline indicated above, the student will receive a grade of Unsatisfactory (U).

More information on UF grading policy may be found at:
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) 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. 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/.

**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/) 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.

**Software Use**
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

**Student Privacy**
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:
http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

**Campus Resources:**
BME 3941: Internship Experience in Biomedical Engineering
Dr. Sarah Rowlinson, Summer 2018
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, 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/.

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.


Library Support, 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/.

