

# Cover Sheet: Request 11303

## BME3XXX Internship Experience in Biomedical Engineering

### Info

|                        |   |
|------------------------|---|
| Process                | Course New Ugrad/Pro  |
| Status                 | Pending   |
| Submitter              | Theus, Kristin undergrad@bme.ufl.edu  |
| Created                | 11/16/2016 3:57:34 PM   |
| Updated                | 3/15/2017 9:01:04 AM  |
| Description of request | 0-3 credits repeatable. Engineering work experience under the supervision of an engineer. |

### Actions

| Step                            | Status   | Group                                      | User             | Comment                      | Updated    |
|---------------------------------|----------|--|------------------|------------------------------|------------|
| Department                      | Approved | ENG - Biomedical Engineering<br>021934001  | Rinaldi, Carlos  |                              | 11/16/2016 |
| No document changes             |          |  |                  |                              |            |
| College                         | Approved | ENG - College of Engineering               | Caple, Elizabeth |                              | 12/2/2016  |
| No document changes             |          |  |                  |                              |            |
| University Curriculum Committee | Comment  | PV - University Curriculum Committee (UCC) | Case, Brandon    | Added to the January agenda. | 12/16/2016 |
| No document changes             |          |  |                  |                              |            |

| Step   | Status   | Group                                      | User             | Comment  | Updated   |
|--|----------|--|------------------|--|-----------|
| University Curriculum Committee                            | Recycled | PV - University Curriculum Committee (UCC) | Case, Brandon    | <p>- UCC form needs to be fixed in regards to amount of variable credit.</p> <p>1. Contradicts itself, asks for 1-3 and then lists 0 credits available for choice.</p> <p>- 4000 level courses require a prerequisite, please list prereq's in the UCC form in the appropriate section.</p> <p>- What is the make-up of the grade?</p> <p>"The grade for this internship will be determined by the student's supervisor in coordination with the BME Department Undergraduate Coordinator or BME Department designee."</p> <p>1. Syllabus states there is an employer evaluation, is this completed by employer or BME supervisor, and how does it pertain to the grade?</p> <p>2. What is the grading scale for the written report?</p> <p>3. There must be some specific measure for grade; objectives/requirements for the student to pass, i.e. minimum number of hours per week should spend in the internship.</p> <p>4. What is the minimum amount of work to achieve an S grade?</p> | 1/18/2017 |
| No document changes  |          |  |                  |  |           |
| College  | Recycled | ENG - College of Engineering               | Caple, Elizabeth | Please address comments made by the UCC. thank you.  | 1/18/2017 |
| No document changes  |          |  |                  |  |           |
| Department   | Approved | ENG - Biomedical Engineering 021934001     | Rinaldi, Carlos  |  | 2/23/2017 |
| Replaced BME4XXX Internship Experience in BME 11.3.16.docx |          |  |                  |  | 2/23/2017 |
| Added BME3XXX Student Registration Request.docx            |          |  |                  |  | 2/23/2017 |
| Added BME3XXX Employer Evaluation.docx                     |          |  |                  |  | 2/23/2017 |
| College  | Approved | ENG - College of Engineering               | Caple, Elizabeth |  | 2/23/2017 |

| Step                              | Status  | Group                                      | User          | Comment                    | Updated   |
|-----------------------------------|---------|--|---------------|----------------------------|-----------|
| No document changes               |         |  |               |                            |           |
| University Curriculum Committee   | Comment | PV - University Curriculum Committee (UCC) | Case, Brandon | Added to the March agenda. | 2/28/2017 |
| No document changes               |         |  |               |                            |           |
| University Curriculum Committee   | Pending | PV - University Curriculum Committee (UCC) |               |                            | 2/28/2017 |
| No document changes               |         |  |               |                            |           |
| Statewide Course Numbering System |         |  |               |                            |           |
| No document changes               |         |  |               |                            |           |
| Office of the Registrar           |         |  |               |                            |           |
| No document changes               |         |  |               |                            |           |
| Student Academic Support System   |         |  |               |                            |           |
| No document changes               |         |  |               |                            |           |
| Catalog                           |         |  |               |                            |           |
| No document changes               |         |  |               |                            |           |
| College Notified                  |         |  |               |                            |           |
| No document changes               |         |  |               |                            |           |

# Course|New for request 11303

## Info

**Request:** BME3XXX Internship Experience in Biomedical Engineering

**Description of request:** 0-3 credits repeatable. Engineering work experience under the supervision of an engineer.

**Submitter:** Theus, Kristin undergrad@bme.ufl.edu

**Created:** 3/15/2017 8:59:50 AM

**Form version:** 4

## Responses

**Recommended Prefix**BME

**Course Level** 3

**Number** XXX

**Category of Instruction** Intermediate

**Lab Code** None

**Course Title** Internship Experience in Biomedical Engineering

**Transcript Title** Internship Exp in BME

**Degree Type** Baccalaureate

**Delivery Method(s)** On-Campus

**Co-Listing** No

**Effective Term** Summer

**Effective Year** 2017

**Rotating Topic?** No

**Repeatable Credit?** Yes

**If repeatable, # total repeatable credit allowed** 3

**Amount of Credit** Variable

**If variable, # min** 0

**If variable, # max** 3

**S/U Only?** Yes

**Contact Type** Supervision of Student Interns

**Weekly Contact Hours** 1-3

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

**Prerequisites** BME major

**Co-requisites** None

**Rationale and Placement in Curriculum** We do not currently have an internship for credit opportunity available to BME students. Creating this course will allow students to participate in internships off-campus either part-time or full-time and receive credit for their work. Students may count 3 credits toward their specialization track or technical electives.

**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.

**Course Textbook(s) and/or Other Assigned Reading** None

**Weekly Schedule of Topics** Determined by internship supervisor and faculty supervisor.

**Links and Policies**

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

<https://www.dso.ufl.edu/drc>

<https://evaluations.ufl.edu/evals>  
<https://evaluations.ufl.edu/results/>  
<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>  
<http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>  
<http://www.counseling.ufl.edu/cwc>  
<http://www.police.ufl.edu/>  
<https://lss.at.ufl.edu/help.shtml>  
<https://www.crc.ufl.edu/>  
<http://cms.uflib.ufl.edu/ask>  
<https://teachingcenter.ufl.edu/>  
[https://writing.ufl.edu/writing-studio/.](https://writing.ufl.edu/writing-studio/)  
[https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf)  
<http://www.distance.ufl.edu/student-complaint-process>

**Grading Scheme** The grade for this internship (S or U) will be assigned 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>

**Instructor(s)** David Gilland, PhD

## Internship Experience in Biomedical Engineering

BME 3XXX Section XXXX

**Class Periods:** N/A

**Location:** N/A

**Academic Term:** Spring 2017

### **Instructor:**

Dr. David Gilland

[gilland@ufl.edu](mailto:gilland@ufl.edu)

(352) 273-0302

Office Hours: Email for appointment, 111 Medical Physics 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):**

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

\*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>) 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 3XXX: 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 3XXX 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 that the approximate number of hours per week that the student will be working over the term of the semester and that the internship is biomedical engineering related, provide a description of the student's responsibilities, and provide detailed contact information of the person or persons who will be supervising the student during 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.

- 1 credit = 10 hours per week
- 2 credits = 20 hours per week
- 3 credits = 30 hours per week

### ***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:

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Scope of Project:

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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:***

#### *Health and Wellness*

#### **U Matter, We Care:**

If you or a friend is in distress, please contact [umatter@ufl.edu](mailto: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](mailto:Learning-support@ufl.edu).  
<https://lss.at.ufl.edu/help.shtml>.

**Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling. <https://www.crc.ufl.edu/>.

**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/>.

**Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers.  
<https://writing.ufl.edu/writing-studio/>.

**Student Complaints Campus**: [https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).

**On-Line Students Complaints**: <http://www.distance.ufl.edu/student-complaint-process>.

**Registration Request**

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This form is required for registration in BME3XXX: Internship Experience in Biomedical Engineering. The completed form must be submitted to the BME Academic Office in the Biomedical Sciences Building, room JG56, before the end of the registration drop/add period. A formal letter on official letterhead from the sponsoring company describing the nature of the internship must also be attached to this form. The letter must indicate that the approximate number of hours per week that you will be working over the term of the semester and that the internship is biomedical engineering related. The letter should provide a description of the work responsibilities and detailed contact information of the person or persons who will be supervising you during the internship.

**This course is S/U graded and repeatable for up to 3 credits. You will be held tuition and fee liable for your registration.**

Student Name: \_\_\_\_\_

UFID: \_\_\_\_\_ Term Requested: \_\_\_\_\_ Credits: \_\_\_\_\_

Employer: \_\_\_\_\_

Supervisor's Name: \_\_\_\_\_

Supervisor's Title: \_\_\_\_\_

Employer Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Supervisor's Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Supervisor's Email: \_\_\_\_\_

\*\*\*\*\*

**BME Undergraduate Coordinator Approval**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Employer Evaluation**

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Student Name: \_\_\_\_\_

Work Dates: \_\_\_\_\_ to \_\_\_\_\_

Employer: \_\_\_\_\_

Supervisor's Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Please select the most appropriate option for each item below to provide clear feedback for the student internship experience at your company where 1=unsatisfactory, 2=needs improvement, 3=meets expectations, 4=above expectations, and 5=exceeds expectations.

|  |  |
|--|--|
| 1. Demonstrates promptness and efficiency in assignments and milestones.             |  |
| 2. Completes tasks with accuracy and thoroughness.                                   |  |
| 3. Demonstrates sound scientific and engineering methods.                            |  |
| 4. Displays independence and initiative at work.                                     |  |
| 5. Displays effective oral communication skills.                                     |  |
| 6. Displays effective written communication skills.                                  |  |
| 7. Interacts well with others and demonstrates good teamwork/citizenship.            |  |
| 8. Demonstrates enthusiasm toward work and life-long learning.                       |  |
| 9. Understands the impact of engineering solutions in a global and societal context. |  |
| 10. Able to identify, formulate, and solve engineering problems.                     |  |
| 11. Exhibits professional demeanor and attitude.                                     |  |
| 12. Able to apply knowledge to practice.   |  |
| 13. Dependability, punctuality, and attendance.                                      |  |
| 14. Overall performance:   |  |

**Employer Evaluation**

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Additional comments (areas where improvement is needed, further experience or courses that would be beneficial to the student, areas where the student excelled that should be noted, etc.).

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_