JEFFERSON COLLEGE

COURSE SYLLABUS

BET240

BIOMEDICAL ELECTRONICS TECHNICIAN INTERNSHIP

3 Credit Hours

Prepared by
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February 20, 2012

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Elizabeth Check, Dean, Career & Technical Education
BET240 Biomedical Electronics Technician Internship

I. CATALOGUE DESCRIPTION

A. Prerequisite: reading proficiency, student grade point average of 3.5 or instructor approval

B. Credit Hour Award: 3

C. Description: The internship is an optional work experience in a biomedical facility under the supervision of an experienced biomedical electronics technician. The student will assist in the performance of safety inspections, preventive maintenance, repairs and calibration of medical equipment. Supervision of the intern is shared by the intern supervisor and the faculty advisor. Topics include: problem solving, use of proper interpersonal skills, interpreting, work authorizations, identifying logistical support requirements, servicing biomedical instruments, and professional development

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

<table>
<thead>
<tr>
<th>Competency</th>
<th>While in this internship, the student be rated:</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROBLEM SOLVING</strong></td>
<td></td>
<td>1-10</td>
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<tr>
<td>Problem identification</td>
<td>Identify a biomedical instrumentation operational problem at the intern’s hospital.</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Problem-solving techniques</td>
<td>Create a set of alternative solutions for an identified biomedical instrumentation operational problem at the intern’s hospital.</td>
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<tr>
<td>Problem-solving techniques</td>
<td>Solve an identified biomedical instrumentation operational problem at the intern’s hospital.</td>
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<tr>
<td><strong>USE OF PROPER INTERPERSONAL SKILLS</strong></td>
<td></td>
<td>1-10</td>
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<tr>
<td>Demonstrate techniques</td>
<td>Practice effective interpersonal skills in the assigned hospital setting.</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Documentation</td>
<td>Maintain a log of contacts with patients, doctors, and hospital staff and indicate type of interpersonal skill involved with each event.</td>
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<tr>
<td><strong>INTERPRETING WORK AUTHORIZATIONS</strong></td>
<td></td>
<td>1-10</td>
</tr>
<tr>
<td>Documentation</td>
<td>Review biomedical instrumentation work authorizations policies and procedures to assure current directives are on file.</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Documentation</td>
<td>Maintain a current file of work authorizations for the biomedical instrumentation section at the intern’s hospital.</td>
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<tr>
<td>Documentation</td>
<td>Maintain a log reflecting actions taken to assure biomedical instrumentation work Authorizations remain current.</td>
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<tr>
<td>IDENTIFYING LOGISTICAL SUPPORT REQUIREMENTS</td>
<td>1-10 Supervisor Advisor</td>
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<tr>
<td>Documentation</td>
<td>Maintain a log reflecting actions taken to meet logistical support requirements at the intern’s hospital.</td>
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<tr>
<td>SERVICING BIOMEDICAL INSTRUMENTS</td>
<td>1-10 Supervisor Advisor</td>
<td></td>
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<tr>
<td>Documentation</td>
<td>Maintain a log reflecting actions taken in servicing biomedical instruments at the intern’s hospital.</td>
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<tr>
<td>PROFESSIONAL DEVELOPMENT</td>
<td>1-10 Supervisor Advisor</td>
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<tr>
<td>Trends</td>
<td>Discuss biomedical instrument field trends and the expected impact on career advancement.</td>
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<tr>
<td>Accreditation</td>
<td>Discuss the available certification agencies which evaluate professional skills/performance in the biomedical instrumentation field.</td>
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<tr>
<td>Decision making</td>
<td>Outline a schedule for gaining professional certification in the biomedical instrumentation field.</td>
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</tbody>
</table>

III. OUTLINE OF TOPICS

A. Problem solving  
B. Use of proper interpersonal skills  
C. Interpreting work authorizations  
D. Identifying logistical support requirements  
E. Servicing biomedical instruments  
F. Professional development.

IV. METHOD(S) OF INSTRUCTION

On the job peer interactive activities. Intern will be working in the field under the supervision of the intern sponsor and the faculty advisor

V. REQUIRED TEXTBOOK(S)

None
VI. REQUIRED MATERIALS

A. Journal, Notebook
B. A Computer with Internet Access
C. Jump Drive

VII. SUPPLEMENTAL REFERENCES

A. Class Handouts
B. Current Internet Resources
C. On-Line Reference Materials

VIII. METHOD OF EVALUATION

A. The student’s grade will be evaluated as outlined in assessment measures and will be weighted as 90%
B. Job attendance will be weighted as 10%
C. Grading Scale:
   
   A = 90-100%
   B = 80-89.9%
   C = 70-79.9%
   D = 60-69.9%
   F = 0-59.9%

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website, http://www.jeffco.edu).
XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.