Instructor:
Dr. Vijay Vaidyanathan
vijay.vaidyanathan@unt.edu
(940) 565-3268
Office: B 131
Office Hours: MW: 10 AM-12 PM or by appointment

Class Schedule:
MW: 8:30 – 9:20 AM, Room: B 185

Lab Schedule:
Please refer to Lab Schedule

Required Textbook:
Introduction to Biomedical Engineering, 3rd edition, 2011
John Enderle and Joseph Bronzino

Additional Reference:
Charles E. Harris, Michael S. Pritchard, Michael J. Rabins

Course Description:
The course focuses on describing, explaining and predicting natural phenomena using a combination of two, 50-minute lectures and a 3-hour laboratory, every week. Students will learn about the origin and history of healthcare practices and ethics in biomedical engineering. Students will learn about human anatomy and physiology and thus be able to describe and explain natural phenomena that occur in the human body. They will also learn to describe naturally occurring action potentials in muscles and nerve cells with reference to homeostasis or a disturbance to it. Students will learn about various systems in the body and how biomedical engineers can enhance their working while improving the quality of life.

Prerequisite(s): None
Course Objectives:
On completion of this course, students will have an ability to recognize ethical and professional responsibilities in biomedical engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts (4).

Assignments:
Homework assignments will be given using UNT’s Canvas program. In-class quizzes will cover reading material from the textbook and reference material. Lab assignments will be given out in the lab session.

Grade Evaluation:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework/Quizzes</td>
<td>15%</td>
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<tr>
<td>Exam 1</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
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<tr>
<td>Laboratory Assignments</td>
<td>25%</td>
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<tr>
<td>Final Exam or Project</td>
<td>20%</td>
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</tbody>
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A – 90-100%
B – 80-89%
C – 70-79%
D – 60-69%
F – < 60%

Disability Policy:
All reasonable accommodation will be made to facilitate special needs. If special accommodations are required, the student must first meet with the staff of the Office of Disability Accommodation (ODA), Union Suite 322, (940) 565-4323. After meeting with that office, please contact me to discuss what accommodations will be necessary. For more information, see http://www.unt.edu/oda.