BME 1311: Introduction to Biomedical Engineering

**Spring 2017**

**COURSE DESCRIPTION:** This course provides an introduction to the field of biomedical engineering. Topics typically include medical imaging, genetic engineering, biomaterials, clinical engineering, instrumentation, and biomechanics.

**COURSE PREREQUISITES:** MATH 1593 or high level math.

**INSTRUCTOR:** Dr. Mohamed Bingabr, Professor of Engineering.

**CONTACTS:** *Office*: Howell 221B ; *Phone*: 974 5718; *Email*: mbingabr@uco.edu

**OFFICE HOURS:** MWF 9:00 – 10:00, 3:00 - 4:00, and by appointment

**CLASS HOURS:** R 12:00 – 12:50 Howell Hall 205

**TEXTBOOK**: Handout

**GRADES:**

Attendance 60 %

Homework and Project Assignments 40 %

A ≥ 90% 80% ≤ B < 90% 70% ≤ C < 80% 60%≤ D <70% F < 60%

Note: Dates of the 2 tests and the final exam will be announced during the semester. Quizzes will be given every Thursday.

**COURSE LEARNING OBJECTIVE:** At the end of this course, students should be able to:

1. Understand the concepts of biomedical engineering.
2. Understand the applications of biomedical engineering.
3. Learn the different fields of biomedical engineering.

**TOPICS COVERED**:

1. Introduction to biomedical engineering.
2. Biomedical instrumentation.
3. Biomedical imaging.
4. Biomechanics and biofluids.
5. Genetic engineering
6. Tissue engineering and biomaterials.

**Student Information Sheet:**

http://www.busn.ucok.edu/academicaffairs/FORMS/StudentINFOSheetSyllabusSPRING04.pdf

## ***ADA STATEMENT***

"The University of Central Oklahoma complies with Section 504 of the Rehabilitation Act of 1973 and the American with Disabilities Act of 1990. Students with disabilities who need special accommodations should make their requests by contacting the coordinator of Disability Support Services, Kimberly Fields at 974-2549. The office is located in the Nigh University Center, Room 415. Students should also notify the instructor of special accommodation needs by the end of the first week of class."