



BME 101, Introduction to Biomedical Engineering

0 Credits

1 Contact hour

Instructor: Alev Erdi, PhD, & Various Members of the BME Department Faculty

Course Coordinator: Alev Erdi Ph.D.

Textbook(s)/Materials Required:

None

Description:

This seminar is designed to orient the new BME student to the Biomedical Engineering Curriculum and Department. Students will be introduced to BME faculty and their research. The three specialization areas will be discussed: Bioinstrumentation, Biomaterials & Tissue Engineering, and Biomechanics. Important resources including the BMES student society, tutoring & mentoring, and career-building will be presented. Students are encouraged to actively participate in discussions.

Prerequisites:

None

This is a required course Freshmen & New Transfer Students

Course Learning Outcomes (CLO):

1. Be able to identify faculty and prominent research areas in the BME department
2. Understand the three specialization areas in the BME program
3. Be familiar with resources to help with study skills and academic planning
4. Be familiar with course registration and advising policies and procedures
5. Have a better understanding of the BS in BME degree requirements
6. Get a preview of the opportunities that await you and the field of Biomedical Engineering at large!

Student Outcomes:

Student outcome 2 - an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

Related CLO - 1, 2, 6

Student outcome 4 - an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

Related CLO – 1, 2, 6

Course Topics: Survey of available student resources at NJIT & in the BME department, as well as a brief introduction to the major areas of research that the BME faculty are involved in.