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Spring 2-1-2016

## Introduction to Biomedical Engineering

Maribel Vazquez CUNY City College

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### **BME101: Introduction to Biomedical Engineering**

An introductory course with an overview of the field of biomedical engineering designed to acquaint the students with its interdisciplinary

nature; research areas presented by the BME faculty.

Lectures/Credit: Fridays 11AM-12PM; ST-402 1.0 Credit

Instructor: Professor M. Vazquez vaZqueZ@ccny.cuny.edu

Department of Biomedical Engineering Steinman Hall, T-403D

Office Hours: Mondays 2<sup>00</sup>PM-3<sup>00</sup>PM, and by appointment

Course Website: <a href="https://portal.cuny.edu/portal/site/cuny">https://portal.cuny.edu/portal/site/cuny</a>

**Attendance:** Students are expected to attend every lecture at 11AM with cell phones

silenced. Please exit the classroom for emergency calls.

Grading: Course grades will be determined by written assignments and in-class

exams as listed. Assignments are due by the following lecture date.  $\underline{\text{NOTE}}$ : Assignments will NOT be accepted from students who are

absent or significantly late to the specified lectures.

2 Reports (350 Words Each)	
Ethics Case Study	15
Health Disparities	15
2 Summaries (200 Words Each)	
BME Lab Tour	10
BME Day Challenges	10
2 Exams (1-Hour Each, closed book)	
Midterm	25
Final	25
Total:	100%

#### **Rules and Regulations:**

- 1. Prompt attendance is required. Excused absences require prior notification to the Instructor (via email or in person).
- 2. Students are encouraged to ask any and every question of interest relating to the BME dept, its policies, courses and BME research areas.
- 3. Plagiarism of any sort will result in an automatic dismissal from the course.
- 4. All student inquiries will be received openly and courteously from the class and instructor.

Code: 41805 ST-402 SP2016

# **BME101: Introduction to Biomedical Engineering**

### **Class Schedule for SP2016**

Class	<u>Date</u>	Topics to be Discussed
1	01.29.16	Introduction: BME/GSOE Structure and Expectations What will I learn in BME? What are my GSOE student rights? How do the administrative and faculty offices help undergraduates?
2	02.05.16	Professionalism & Academic Integrity <u>Guest Lecturer</u> : Mr. Rawlins Beharry, Director, Office of Student Development How can students get help with course work? Advising? Funding?
3	02.09.16 (T)	Internships, Career Networking and Experience <u>Guest Lecturer</u> : Ms. Katie Nailler, Career & Professional Development Institute  How can students be professionals? How to find internships/launch my career?
	02.12.16	No Classes (CCNY Holiday Schedule)
4	02.19.16	Ethics in BME Research: Case Study  Guest Lecturer: Mr. Sean McCutcheon (BME PhD Candidate)
5	02.26.16	<u>Research Lecture 1</u> : Prof. J. Dmochowski (BME205/405/505) What is neural engineering?
6	03.04.16	<u>Research Lecture 2</u> : Prof. R. Majeska (BME310) What kinds of bone biomechanics research does the dept support at CCNY?
7	03.11.16	BME Curriculum Overview: Shortcuts and Pitfalls <u>Guest Lecturer</u> : Dr. P. Payton (Undergraduate Director) How can I avoid course sequence conflicts? If I don't graduate in 4 years? Should I engage in research?
8	03.18.16	MIDTERM EXAM (In Class)
9	03.23.16 (T)	<u>Research Lecture 3</u> : Prof. B. Fu (BME305) What kind of BME research incorporates cardiovascular systems and cancer?
	03.25.09	No Classes (CCNY Holiday Schedule)
10	04.01.16	BME JRs, SRs and Alumni in Industry, Graduate/Med Schools Where do BMEs work? What kind of responsibilities do they have?
11	04.08.16	Guided Tours of BME Research Laboratories
12	04.15.16	<u>Research Lecture 4:</u> Health Disparities in the USA <u>Guest Lecturer</u> : Dr. A. Motta-Mas (Sophie Davis School of Medicine)
	04.22.16 04.29.16	CCNY Spring Break- No Classes CCNY Spring Break- No Classes
13	05.06.16	BME DAY: Describe Senior Design Challenges & Solutions
14	05.13.16(R)	BME Undergraduate luncheon: Who are the other BME faculty? What about my unanswered questions?
	05.27.16	FINAL EXAM: TBD by CCNY