Syllabus

Biomedical Engineering Trends in Biomedical Engineering (334021)

Winter semester 2020-2021 (Sunday, 16:30-17:20, room 201)

(1 credit)

Description

This course will introduce to the students with leading research and development trends in the field of biomedical engineering. The lectures will be given by faculty staff on specific research topics. Lectures will provide a glimpse on leading topics in the fields of biomechanics, biomaterials, biomedical optics, tissue and genetic engineering, medical devices and more.

Prerequisites

None.

** For students at their first semester

Instructor

Asst. Prof. Netanel Korin, korin@bm.technion.ac.il

Office: Julius Silver (Biomedical Engineering) 226, +97282946114

Teaching Assistant

Moran Levi, smoranle@campus.technion.ac.il

Office: Julius Silver (Biomedical Engineering) 223, 077-8871486

Online Resources

Moodle: all lecture notes / supplementary material / slides are available there.

Course Objectives

- To introduce to the students the field of biomedical engineering and leading applications in the filed
- To introduce the students with cutting edge science topics in the field of biomedical engineering.

Course Topics

Lectures will provide a glimpse on leading topics in the fields of biomechanics, biomaterials, biomedical optics, tissue and genetic engineering, medical devices and more.

The specific list of lectures and timeline: TBD

Course Expectations & Grading

The course will include one hour of lecture per week.

Breakdown of course grading:

Attendance - 39%

Final Exam (multiple-choice test) - 61%

Assignments & Readings

Weekly lecture notes and supplementary material will available through Moodle.

Ethics

The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition.

Report any violations you witness to the instructor.

Students with Disabilities

Any student with a disability who may need accommodations in this class must obtain an accommodation letter from Technion International's guidance counselor, at counselor@int.technion.ac.il

ABET Outcomes

(a) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

(b) Recognition of the need for, and an ability to engage in life-long learning.

(c) Knowledge of contemporary issues.