

## **BME 522: Immunoengineering**

### **Biomedical Engineering**

Immunoengineering describes efforts by immunologists and engineers to design new technologies that can be used to better understand the immune system as well as harness its immense power to improve human health. This course provides an in-depth introduction to immunoengineering through five modules: 1) fundamentals of immunology, 2) the immunologist toolbox, 3) vaccines and immunotherapies, 4) drug delivery principles for vaccines and immunotherapies, and 5) materials for immunoengineering.

3 Credits

### **Prerequisites**

- [Bisc 160: Biological Sciences I](#) \$target.descriptions.MinimumGrade\$
- [Bisc 161: Biological Sciences I Laboratory](#) \$target.descriptions.MinimumGrade\$
- [Bisc 162: Biological Sciences II](#) \$target.descriptions.MinimumGrade\$
- [Bisc 163: Biological Sciences II Laboratory](#) \$target.descriptions.MinimumGrade\$
- [Chem 105: General Chemistry I](#) \$target.descriptions.MinimumGrade\$
- [Chem 106: General Chemistry II](#) \$target.descriptions.MinimumGrade\$
- [Chem 115: General Chemistry Laboratory I](#) \$target.descriptions.MinimumGrade\$
- [Chem 116: General Chemistry Laboratory II](#) \$target.descriptions.MinimumGrade\$

### **Instruction Type(s)**

- Lecture: Lecture for BME 522

### **Subject Areas**

- [Bioengineering and Biomedical Engineering](#)

