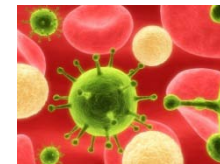




BIOSCIENCE IN THE 21ST CENTURY:

COURSE HIGHLIGHTS AND PROSPECTS



COURSE GOALS AND EXPECTATIONS

Welcome and Introductions

What is this course about?

Course highlights and requirements

Course website: www.lehigh.edu/~inbios21
(for lecture videos, syllabus, schedule)

Coursesite: <http://coursesite.lehigh.edu/>
(for course assignments, study guides, resources)

Bioscience PLAYBILL: Participating Faculty and Guests

Departments and Programs represented:

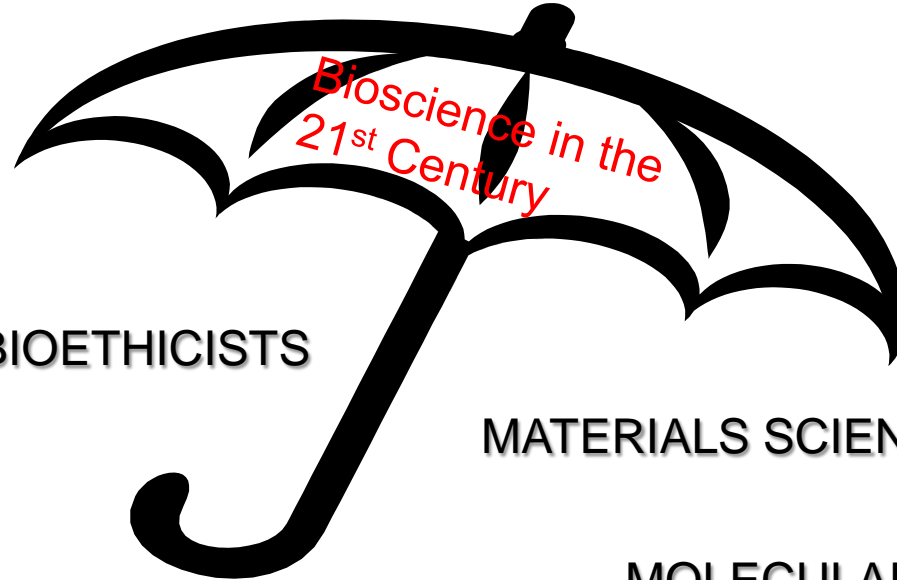
Biological Sciences, Bioengineering, Chemical Engineering, Civil & Environmental Engineering, Chemistry, Computer Science & Engineering, Materials Science & Engineering, Electrical Engineering



BIOSCIENCE IN THE 21ST CENTURY

- What biologically-relevant problems confront society?
- What are the strategies for studying these problems?
- What are the prospects for solutions to these problems?

MULTIDISCIPLINARY APPROACHES



NEUROBIOLOGISTS

BIOETHICISTS

BIOCHEMISTS

MATERIALS SCIENCE ENGINEERS

BIOLOGICAL ENGINEERS

MOLECULAR BIOLOGISTS

CHEMISTS

CLINICIANS

MICROBIOLOGISTS

CELL BIOLOGISTS

VIROLOGISTS

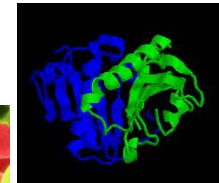
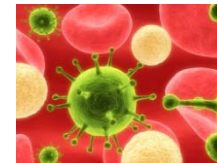
PHYSICISTS

CHEMICAL ENGINEERS

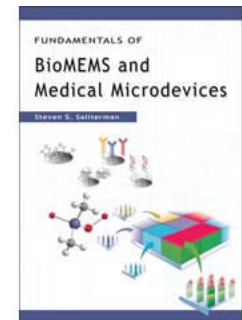
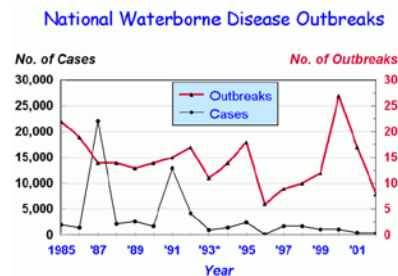
COMPUTER SCIENTISTS

Topics for consideration:

- Neurophysiological processes
- Cancer and novel treatment strategies
- Genomics, Proteomics and bioinformatics
- Stem cell biology and disease treatment prospects
- Advances in engineered biosystems , biodevices, and bioimaging
- **Social/Ethical issues in bioscience**
- Microbiology & Infectious diseases
- Human physiology
- Environmental health



<http://www.dep.state.pa.us>



spie.org

Bioscience in the 21st Century

www.lehigh.edu/~inbios21

Bioscience in the 21st Century

Course Schedule

www.lehigh.edu/~inbios21

Bioscience in the 21st Century

Syllabus and Course Requirements

www.lehigh.edu/~inbios21