# Biotechnology and Bio-analysis Certificate

#### Fact

The U.S. Bureau of Labor Statistics (BLS) projected employment of biological scientists, who work largely for universities and government laboratories, to increase 21% from 2012-2022 (www.bls.gov). The BLS noted that biotechnology in particular has driven research and development job growth. The BLS also expected employment for scientists, who work in scientific research and development firms, to increase due to the growth of biotechnology. These scientist jobs were projected to increase 40% from 2012-2022, according to the BLS."

#### **Innovative Preparation**

According to the American Chemical Society, biotechnology, in the broadest sense, involves the use of living organisms or cell processes to make useful products. Biotechnology is the field making daily headlines as new biotechnology advances and analytical techniques are unlocking the mysteries of human disease and leading to the development of numerous therapeutic agents and other "biologic" products.

### **Admission Requirements**

The Biotechnology and Bio-analysis Certificate requires students to complete the following prerequisites:

College Chemistry I and II (with lab), College Biology I and II (with lab), Organic Chemistry I and II (with lab), Analytical Chemistry (with lab), Microbiology (with lab), and Cell or Molecular Biology (with lab).

### **Unlimited Opportunity**

GSU offers a superior educational opportunity at an affordable tuition rate. GSU's outstanding faculty and quality programs prepare gradates to reach their goals and meet the demands of the future.

### For more information:

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## **Certificate Requirements**

The following courses must be taken at the upper division level for the certificate:

- BIOL 4530 Biotechnology (2)
- BIOL 4531 Biotechnology Laboratory (1-2)
- CHEM 4331 Biochemistry Lecture (3)
- CHEM 4332 Biochemistry Laboratory (1)
- CHEM 4333 Analytical Biochemistry (2)
- CHEM 4334 Analytical Biochemistry Laboratory (1)
- CHEM 4335 Introduction to Bioinformatics (1)
- CHEM 4631 Mass Spectrometry of Peptides (1)
- NOTE: Other courses as approved by academic advisor.

### Total - 12 credit

Catalog Year 2015-2016 🖄