

# Syllabus for ABT715

## Techniques in Biotechnology

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**NOTE:** This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

### Course Description

Application of biological and chemical methods to modern biotechnological product development. Overview of analysis techniques used to characterize products and evaluate quality and safety. Exploration of technological pipeline from conception to market, including proof-of-concept assessment, pre-clinical trials, clinical trials, and post-production testing.

### Prerequisite(s)

ABT 700 Principles of Biotechnology

### Course Outcomes

Upon completing this course, you will be able to do the following:

- Outline proper experimental design, experimental controls, and quality controls for proper quantitative experimental design
- Identify and interpret basic statistical methods and their outcomes in experimental data
- Summarize the phases of product development, testing, and commercialization
- Compare classical and emerging technologies for the identification and characterization of biotechnological products
- Apply appropriate technologies to analyze biotechnological products
- Analyze product safety and efficacy
- Employ knowledge of biotechnological safety and efficacy requirements to assess the commercialization potential of a product
- Critique existing product development processes using technological information on the safety and efficacy of the product
- Interpret data from product testing to assess viability of product for commercialization

### Course Requirements/Components

Grades will be assessed using a variety of methods:

Exams and Quizzes

Discussions

Interactive Assignments

Written Assignments

## Final Project

### Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

Grade	Percentage Range
A	92% - 100%
A-	89% - 91%
B+	84% - 88%
B	80% - 83%
B-	76% - 79%
C+	72% - 75%
C	68% - 71%
C-	64% - 67%
F	0 - 64%

Assignment Weights	Percentage
Exams	10%
Quizzes and Tutorials	20%
Discussions	20%
Interactive Assignments and Written Assignments	20%
Final Project	30%
<b>Total</b>	<b>100%</b>