

Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering
Genetic and Bioengineering Department
2024-2025 Fall Semester

Syllabus

Code/Name	GBM 303 / Biotechnology
Type	Required
Credit/ECTS	4/4
Hour per Week	3 (3+0+0)
Level/Year	Undergraduate/3
Semester	Fall
Classroom	D305
Content	Timeline biotechnology, Cell structure, The artificial manipulation, modification, and recombination of DNA, methods of recombinant DNA technology, applications of biotechnology, microbial biotechnology, medical biotechnology, plant biotechnology.
Prerequisites	
Textbooks	<i>Primary</i> Class Notes <i>Supplementary</i>
Objectives	<ul style="list-style-type: none">• To learn biotechnology• To learn applications of biotechnology• To learn microbial biotechnology, medical biotechnology, plant biotechnology
Course Outcomes	In this course you will be able to: CO1 Outline the biotechnology concepts. CO2 Outline the scope and applications of biotechnology. CO3 Classify fundamental areas of biotechnology. CO4 Improve problem solving ability. CO5 Practice professional responsibilities and ethics.

Weekly Schedule of Topics

W	Topic
1	Introduction to biotechnology
2	Timeline of biotechnology
3	Introduction to applications of biotechnology
4	Applications of biotechnology
5	Gene cloning processes
6	Tools Used in biotechnology
7	Recombinant DNA technology in biotechnology
8	Genetically Modified Organisms
9	Genetically Modified Plants
10	Microbial biotechnology
11	Plant biotechnology
12	Medical biotechnology
13	Molecular Markers and Their Applications
14	Enzyme Immobilization

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**Professional
Contribution**

Understand the field of biotechnology and its applications

Contribution to Program Outcomes*

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011
CO1	4	3	1	5	4	3	1	3	2	3	5
CO2	4	4	1	5	5	3	1	3	4	3	5
CO3	4	4	1	4	5	3	1	3	2	3	5
CO4	0	0	3	1	3	3	2	3	4	4	5
CO5	0	0	1	1	1	3	4	3	5	1	4

* Contribution Level | 0: None | 1: Very Low | 2: Low | 3: Medium | 4: High | 5: Very High

**Special
Conditions**

Requirements

Course Policy

- Be in the class on time.
- English should be used to communicate with one another.
- Mobile phone should be switched off and put away during the class.
- At least 70% attendance is required, otherwise a grade of **DZ** will be assigned.

**Cheating &
Plagiarism**

- Copying or letting someone copy your work on exams, assignments, or reports is cheating.
- Cutting and pasting text, figures and tables from web sources or any other electronic source is plagiarism.
- The consequence of academic dishonesty is to receive a grade of **FF** for the course.

Evaluation

Midterm	50%
<u>Final Exam</u>	<u>50%</u>
Total	100%

Rubric

A rubric will be announced prior to exams.

Instructor

Name/Surname	Aslı Giray	Email	asli.giray@alanya.edu.tr
Room		Office Hours	W 11.30-12.30 T 13.30-14.30

Prepared by Aslı Giray.