ATILIM UNIVERSITY

FACULTY OF MEDICINE

2025-2026 ACADEMIC YEAR

MED 323	Bioengineering and Advanced Therapeutic Strategies in Medicine
	Instructor: Assist. Prof. Dr. Özge BOYACIOĞLU
TIME	
(Weeks/Hours)	TOPICS
25 September 2025	Overview of Advanced Therapeutic Approaches
15:30-17:20	Lecture Hall: C-401
2 October 2025	Fundamentals of Drug Delivery Systems
15:30-17:20	Lecture Hall: C-401
9 October 2025	Smart Drug Delivery Systems with Nanotechnology I: Fundamentals
15:30-17:20	and Classification
	Lecture Hall: C-401
16 October 2025 15:30-17:20	Smart Drug Delivery Systems with Nanotechnology II: Targeting and
	Stimuli-Responsive Approaches
	Lecture Hall: C-401
23 October 2025	Tumor Microenvironment and the Effect of Drug Delivery on the
15:30-17:20	Tumor Microenvironment
	Lecture Hall: C-401
30 October 2025	Advanced Drug Delivery Strategies in Cancer Treatment
15:30-17:20	Lecture Hall: C-401
6 November 2025 15:30-17:20	Case Studies and Solutions-I
	Lecture Hall: C-401
13 November 2025 15:30-17:20	MIDTERM EXAM
	Lecture Hall: C-401
20 November 2025 15:30-17:20	Advanced Topics in Cell and Tissue Engineering I: Advanced Culture
	Systems and Tumor Microenvironment Modeling
	Lecture Hall: C-401
27 November 2025	Advanced Topics in Cell and Tissue Engineering II: Biosignal
15:30-17:20	Molecules
	Lecture Hall: C-401

4 December 2025	Advanced Topics in Cell and Tissue Engineering IV: Regenerative
15:30-17:20	Medicine and Bioprinting
	Lecture Hall: C-401
11 December 2025	Advanced Topics in Cell and Tissue Engineering III: Decellularization
15:30-17:20	and Recellularization Approaches
	Lecture Hall: C-401
18 December 2025	Personalized Medicine Applications: Omics Approaches
15:30-17:20	Lecture Hall: C-401
25 December 2025	Case Studies and Solutions-II
15:30-17:20	Lecture Hall: C-401
1 January 2026	HAPPY NEW YEAR
8 January 2026	Article Hour
15:30-17:20	Lecture Hall: C-401
15 January 2026	FINAL EXAM and Report Writing
15:30-17:20	Lecture Hall: C-401