ATILIM UNIVERSITY

SCHOOL OF MEDICINE

2025-2026 ACADEMIC YEAR / FALL TERM

MED 313	**Protein Analysis & Proteomics** **Instructor: Prof. Dr. Nedret KILIÇ**
TIME **(Weeks/Hours)**	**TOPICS**
25 September 2025 15:30-17:20	Introduction to Proteomics: The proteome, The tasks in proteomics, Challenges in proteomics, Proteomics in relation to other -omics and system biology Lecture Hall: C001
2 October 2025 15:30-17:20	Separation and detection technologies-1: Introduction to experimental strategies in proteomics, Sample preparation Lecture Hall: C001
9 October 2025 15:30-17:20	Separation and detection technologies-2: Gel-based technologies/2D gels, Gel-based separation, Visualization and analysis of proteins/peptides in gels Lecture Hall: C001
16 October 2025 15:30-17:20	Separation and detection technologies-3: Gel-free separation technologies, HPLC, RPLC, IEC Lecture Hall: C001
23 October 2025 15:30-17:20	Separation and detection technologies-4: CE, SEC, Optical detectors Lecture Hall: C001
30 October 2025	**Committee Exam Week: No Classes**
6 November 2025 15:30-17:20	Basic principles of mass spectrometry for proteomics Lecture Hall: C001
13 November 2025 15:30-17:20	**MIDTERM EXAM** **Lecture Hall: C001**
20 November 2025 15:30-17:20	Mass analyzers and mass spectrometers-1 Lecture Hall: C001

27 November 2025 15:30-17:20	Mass analyzers and mass spectrometers-2 Lecture Hall: C001
4 December 2025 15:30-17:20	Analysis and interpretation of mass spectrometric and proteomic data: Analysis of MS data Lecture Hall: C001
11 December 2025 15:30-17:20	Analysis and interpretation of mass spectrometric and proteomic data: Analysis of MS/MS data Lecture Hall: C001
18 December 2025 15:30-17:20	Quantification of LC MS and MS/MS data from complex samples Lecture Hall: C001
25 December 2025 15:30-17:20	Novel strategies in proteomics: Imaging mass spectrometry, Quantitative proteomics for biomarker discovery Lecture Hall: C001
1 January 2026	**HAPPY NEW YEAR**
8 January 2026 15:30-17:20	**FINAL EXAM** **Lecture Hall: C001**