Course Title: Biopharmaceuticals

Course code: • ^

Credit (Theory):⁷

ECTS-Credits (weekly workload):⁷

Prerequisite: Pharmaceutics \, Immunology

Department of Pharmaceutical Biotechnology, School of Pharmacy- Iran University of Medical Sciences

The Second semester of the $7 \cdot 77 - 7 \cdot 75$ school year

Target students: Foreign and Iranian Students

All Classes will be held in Shahin St. Building.

Instructors: Dr. Montazeri, Dr. Mottaghi

Instructor in charge: Dr. Mottaghi

References:

- 1- Biotechnology and Biopharmaceuticals: Transforming Proteins and Genes into Drugs, Wiley, latest edition
- Y- Biopharmaceuticals: Biochemistry and Biotechnology, Wiley, latest edition
- ۲- https://www.fda.gov/vaccines-blood-biologics

No.	Session Topic	Date	Instructor	Duration
١	Introduction to Biopharmaceuticals	September 17, ۲۰۲۳	Dr. Mottaghi	۲ hours
٢	Vaccines 1	September ۲۳, ۲۰۲۳	Dr. Mottaghi	۲ hours
٣	Vaccines ^۲	September ^r •, ^r •۲ ^r	Dr. Mottaghi	۲ hours
٤	Vaccines ^r	October $\cdot \vee$, $\tau \cdot \tau \tau$	Dr. Mottaghi	۲ hours
0	Hormones	October 12, Y.Y.	Dr. Mottaghi	۲ hours
٦	Glucagon-like Peptides Agonists	October ^{۲۱} , ۲۰۲۳	Dr. Mottaghi	۲ hours
٧	Probiotics and postbiotics	October ^۲ ^۸ , ۲۰۲۳	Dr. Mottaghi	۲ hours
٨	Antibody-Based Products \	November • [£] , ۲.۲۳	Dr. Montazeri	۲ hours
٩	Antibody-Based Products *	November ۱۱, ۲۰۲۳	Dr. Montazeri	۲ hours
۱.	Cytokines	November ۱۸, ۲۰۲۳	Dr. Montazeri	۲ hours
11	Gonadotropins	November ۲0, ۲۰۲۳	Dr. Montazeri	۲ hours
١٢	Blood Factors	December • ۲, ۲ • ۲ ۲	Dr. Montazeri	۲ hours
12	Nucleic Acid Based Therapies	December • ٩, ٢ • ٢ ٢	Dr. Montazeri	۲ hours
12	Cell Therapies	December 17, Y.YY	Dr. Montazeri	۲ hours
10	Final Exam		Dr. Montazeri and Dr. Mottaghi	