

[Educational Program for Ms.c in Clinical Biochemistry]

Tabriz University of Medical Sciences - Faculty of Medicine

Department of Biochemistry and Clinical Laboratories

Semester	Course Code	Course Name	Course Type	Credits		
				Th	Pr	Total
First(12 Credits)	01	Medical Information Systems	Remedial	0.5	0.5	1
	04	General Immunology	Remedial	1.5	0.5	2
	05	Hematology	Remedial	1.5	0.5	2
	08	Laboratory Methods and Instrument Familiarization	Compulsory	2	1	3
	09	Metabolic Pathways and Disorders	Compulsory	2	-	2
	10	Enzymology	Compulsory	2	-	2
Second(12 Credits)	06	Microbiology	Remedial	1.5	0.5	2
	11	Clinical Biochemistry 1	Compulsory	3	-	3
	12	Clinical Biochemistry 2	Compulsory	2	-	2
	13	Hospital Training	Compulsory	-	1	1
	20	Research Methods	Elective	2	-	2
	-	Principles of Writing Articles in English	Remedial	2	-	2
Third(11 Credits)	-	Principles and Foundations of Disaster and Accident Risk Management	Remedial	2	-	2
	14	Molecular Diagnostic Methods	Compulsory	1.5	0.5	2
	15	Biochemistry of Hormones	Compulsory	2	-	2
	16	Seminar	Compulsory	1	-	1
	17	Internship in Clinical Diagnostic Laboratory	Compulsory	-	2	2
	21	Entrepreneurship, Industry Liaison, and Knowledge-Based Production	Elective	1	-	1
	24	Bioinformatics	Elective	0.5	0.5	1
Fourth(8 Credits)	18	Thesis/Dissertation	Compulsory	-	8	8

Total Credits				28	15	43
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Elective Workshops

No.	Workshop Name	Semester
1	Biosafety	Semester 1
2	Ethics in Research and Professional Ethics	Semester 2
3	Working with Laboratory Animals	Semester 3
4	Cell Culture	Semester 3
5	Required Application Software	Semester 4
6	Entrepreneurship and Industry Liaison	Semester 4