

DEPARTMENT OF BIOCHEMISTRY

MASTER OF SCIENCE WITH SPECIALTY IN BIOCHEMISTRY (M.S.)

TOTAL CREDIT-HOURS: 33

First Year: 24 Credit-Hours

BCHM 8500	Biochemistry	6
BCHM 8551	Methods in Protein and Nucleic Acid Biochemistry	2
BCHM 8552	Methods in Lipid and Carbohydrates Biochemistry, Nutrition, and Biochemical Pharmacology	2
BCHM 8531	Research Seminar Series I	1
CBIO 8500	Statistics for the Biomedical Sciences	3
BCHM 8532	Research Seminar Series II	1
BCHM 8507	Special Biomedical Laboratory Techniques I or Elective Recommended by the Department	3
BCHM 8504	Biochemistry of Proteins	3
BCHM 8502	Molecular Biology or Equivalent Molecular Biology Course Recommended by the Department	3

Second Year: 9 Credit-Hours

BCHM 8595	Research for Master's Thesis	6
Electives		3

MASTER OF SCIENCE WITH SPECIALTY IN BIOCHEMISTRY WITHOUT THESIS (M.S.)

TOTAL CREDIT-HOURS: 37

First Year: 14 Credit-Hours

BCHM 8500	Biochemistry	6
BCHM 8551	Methods in Protein and Nucleic Acid Biochemistry	2
BCHM 8552	Methods in Lipid and	

	Carbohydrates Biochemistry, Nutrition, and Biochemical Pharmacology	2
CBIO 8500	Statistics for the Biomedical Sciences	3
BCHM 8995	DOE-I	1

Second Year: 14 Credit-Hours

BCHM 8517	Physical Chemistry of Macromolecules (Enzyme Reaction Mechanism)	3
BCHM 8504	Biochemistry of Proteins	3
BCHM 8995	DOE-II	1
BCHM 8502	Molecular Biology	3
BCHM 8515	Enzyme Kinetics and Mechanism	2
BCHM 8995	RSM	1
BCHM 8995	QA	1

Third Year: 9 Credit-Hours

BCHM 8526	Proposal	3
BCHM 857__	Research	6

**DOCTOR OF PHILOSOPHY WITH SPECIALTY IN
BIOCHEMISTRY (PH.D.)**

TOTAL CREDIT-HOURS: 63

First Year: 24 Credit-Hours

BCHM 8500	Biochemistry	6
BCHM 8551	Methods In Protein and Nucleic Acid Biochemistry	2
BCHM 8552	Methods in Lipid and Carbohydrates Biochemistry, Nutrition, and Biochemical Pharmacology	2
BCHM 8531	Research Seminar Series I	1
CBIO 8500	Statistics for the Biomedical Sciences	3
BCHM 8532	Research Seminar Series II	1
BCHM 8504	Biochemistry of Proteins	3
BCHM 8502	Molecular Biology	3

BCHM 8507	Special Biomedical Laboratory Techniques I or Elective Recommended by The Department	3
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Second Year: 21 Credit-Hours

BCHM 8533	Research Seminar Series III	1
BCHM 8515	Enzyme Kinetics and Mechanism	2
BCHM 8517	Physical Chemistry of Macromolecules (Enzyme Reaction Mechanism)	3
BCHM 8534	Research Seminar Series IV	1
BCHM 8525	Recent Advances in Biochemistry and Molecular Biology	2
BCHM 8530	Regulation of Gene Expression in Eucaryotes	3
BCHM 8526	Proposal	3
	Electives Recommended by the Department	3
	Electives	3

Third and Fourth Years: 18 Credit-Hours

BCHM 8526	Special Topics in Biochemistry <i>(Thesis Proposal and Comprehensive Examination)</i>	3
BCHM 8599	Research for Doctoral Thesis	15