

## BIOCHEMISTRY DEGREE

ACADEMIC YEAR 2007/2008

Degree	Biochemistry
Centres	<p>Student Secretary's office:  Faculty of Sciences  C/Francisco Tomás y Valiente, 7  Campus de Cantoblanco  28049 – Madrid  Phone: 91 497 83 49</p> <p>Teaching:  Faculty of Sciences  C/ Francisco Tomás y Valiente, 7  Campus de Cantoblanco  28049 Madrid  Faculty of Medicine  C/ Arzobispo Morcillo, 2 y 4  28029 Madrid  Phone: 91 497 53 28  <a href="#">Web page</a></p>
Academic Credits	138
2 <sup>nd</sup> cycle only	

Total Credits	Compulsory Credits	Optional Credits	Free Election Credits	Total
Second Cycle	111	13	14	138
Total	111	13	14	138

First Course	Compulsory Credits	Optional Credits	Compulsory + Optional	Free Election Credits
	57	10	67	-

Code	Subject	Type	Credits	Semester
12640	CellBiology	(Tr)	6	1
12641	Enzymology	(Tr)	3	1
12642	Experimental Biochemistry I	(Tr)	17	1
12643	Macromolecular Structure	(Tr)	4	1
12645	Molecular Genetics and Genetic Engineering	(Tr)	4	1
12649	Virology	(Ob)	3	1
12644	Experimental Biochemistry II	(Tr)	10	2
12646	Immunology	(Tr)	3	2
12647	Biosynthesis of Macromolecules	(Tr)	3,5	2
12648	Metabolism and its Regulation	(Tr)	3,5	2

Second Course	Compulsory Credits	Optional Credits	Compulsory + Optional	Free Election Credits
	54	3	57	-

Code	Subject	Type	Credits	Semester
12650	Biophysics	(Tr)	4	1
12651	Experimental Biochemistry III	(Tr)	9	1
12652	Clinical Biochemistry and Molecular Pathology	(Tr)	3	1
12653	Industrial Biochemistry and Microbiology	(Tr)	4	1
12654	Advanced Experimental Biochemistry I	(Ob)	17	Annual
12655	Advanced Experimental Biochemistry II	(Ob)	17	Annual

### Optional Subjects Offer

#### First Course

Code	Subject	Type	Credits	Semester
12656	Complements of Microbiology	(Op)	2	1
12657	Complements of Physical Chemistry	(Op)	2	1
12658	Complements of Genetics	(Op)	2	1
12659	Complements of Organic Chemistry	(Op)	2	1
12676	History of Biochemistry	(Op)	1	1
12678	Instrumental Techniques	(Op)	3	1
12660	Molecular Biology of the Cell	(Op)	3	2
12661	Animal Developmental Biology	(Op)	2	2
12666	Human Molecular Genetics	(Op)	3	2
12669	Control of Cell proliferation and Division	(Op)	3	2
12677	Bioinformatics	(Op)	2	2

## Second Course

Code	Subject	Type	Credits	Semester
12665	Molecular Pharmacology and Toxicology	(Op)	3	1
12663	Molecular Endocrinology	(Op)	3	1
12664	Molecular Neurobiology	(Op)	3	1
12668	Clinical Microbiology, Virology, and Parasitology	(Op)	4	1
12670	Animal Biotechnology	(Op)	4	1
12671	Plant Biotechnology	(Op)	4	1
12672	Biotechnology of Microorganisms	(Op)	4	1
12675	Enzymatic Biotechnology	(Op)	3	1

(Tr): Troncal = Compulsory Credits

(Ob): Obligatorio = Compulsory Credits

(Op): Optativo = Optional Credits