

## PhD program in Microbiology (2013)

The total minimum required number of credits:	94 credits
- Coursework:	20 credits
+ Basic courses:	12 credits
• Required:	09 credits
• Elective:	03/6 credits
+ Advanced foreign languages for academic purposes:	04 credits
+ Advanced courses:	06/12 credits
+ Overview:	02 credits
- Research	
- PhD Thesis:	70 credits

### Available curriculum :

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
<b>I</b>	<b>Part 1. Foreign language</b>						
1.	ENG8001	Advanced English for Academic Purposes	4			60	
<b>II</b>	<b>Part 2. Coursework</b>						
<b>II.1</b>	<b>Basic courses</b>		<b>12</b>				
<b>II.1.1</b>	<b>Required</b>		<b>9</b>				
2.	BIO8041	<i>Advanced microbial Physiology</i>	3	30		15	
3.	BIO8042	<i>Advanced molecular Virology</i>	3	30		15	
4.	BIO8043	<i>Microbial ecology</i>	3	30		15	

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
<b>II.1.2 Elective</b>			<b>3/6</b>				
5.	BIO8044	<i>Biological diversity in prokaryotes</i>	3	30		15	BIO8041, BIO8042, BIO8043
6.	BIO8045	<i>Mechanisms of microbial pathogenesis</i>	3	30		15	BIO8041, BIO8042, BIO8043
<b>II.2 Advanced courses</b>			<b>6/12</b>				
7.	BIO8046	<i>Advanced techniques in Microbiology</i>	3	30		15	BIO8041, BIO8042, BIO8043
8.	BIO8047	<i>Probiotics</i>	3	30		15	BIO8041, BIO8042, BIO8043
9.	BIO8048	<i>Microbial ecology-advanced</i>	3	30		15	BIO8041, BIO8042, BIO8043
10.	BIO8049	<i>Systematics of prokaryotes</i>	3	30		15	BIO8041, BIO8042, BIO8043
<b>II.3 Overview</b>			<b>2</b>				
11.	BIO8050	<i>Research Perspective Report</i>	2			30	
<b>III Part 3. Research (research planning, publishing ...)</b>							
<b>IV Part 4. Doctoral Thesis</b>							
12.	BIO9005	<i>Doctoral Thesis</i>	70				
<b>Total</b>			<b>94</b>				