

MODULE	CONTENT	YEAR	TERM	CREDITS	TYPE
	Microbiology II	2 <sup>nd</sup>	2 <sup>nd</sup>	6 ECTS	Obligatory
<b>LECTURER(S)</b>			<b>Postal address, telephone n°, e-mail address</b>		
<ol style="list-style-type: none"> <li>1. Dra. Elisabet Aranda Ballesteros</li> <li>2. Dr. Antonio Cobo Molinos</li> <li>3. Dra. Victoria Béjar Luque</li> <li>4. Dr. Jesús González López</li> <li>5. Dr. Alejandro González Martínez</li> <li>6. Dra. Inmaculada Llamas Company</li> <li>7. Dr. Fernando Martínez-Checa Barrero</li> <li>8. Dra. Mercedes Monteoliva Sánchez</li> </ol>			Department of Microbiology, 4 <sup>rd</sup> Floor, Faculty of Pharmacy, Phone number: +34 958 249051. Microbiology Laboratory, CIBM, PTS. Institute of Water Research.  <ol style="list-style-type: none"> <li>1. 958 241000 ext 20379</li> <li>2. 958249051</li> <li>3. 958-241705 / 958-249935</li> <li>4. 958-243876</li> <li>5. 958-242980</li> <li>6. 958-241741/ 958-249935</li> <li>7. 958-241744/ 958-249935</li> <li>8. 958-243875</li> </ol>		
<b>DEGREE WITHIN WHICH THE SUBJECT IS TAUGHT</b>					
Degree in Pharmacy					
<b>PREREQUISITES and/or RECOMMENDATIONS (if necessary)</b>					
Having studied and passed the following subjects: <b>Structural Biochemistry, Metabolic Biochemistry, Parasitology and Microbiology I.</b>  Students should have basic knowledge related to the techniques used for the culture of microorganisms.					
<b>BRIEF ACCOUNT OF THE SUBJECT PROGRAMME (ACCORDING TO THE DEGREE)</b>					
Description of microorganisms with clinical, industrial and ecological importance related to the pharmaceutical activity.					
<b>GENERAL AND PARTICULAR ABILITIES</b>					



- A. Generic competences: CG3; CG9; CG10; CG13  
B. Specific competences: CEM3.4; CEM3.5; CEM3.6; CEM3.8

### **OBJECTIVES (EXPRESSED IN TERMS OF EXPECTED RESULTS OF THE TEACHING PROGRAMME)**

- To describe the microbial world related to the pharmaceutical activity.

### **READING**

#### **Basic Bibliography:**

- MADIGAN, M.T., MARTINKO, J.M. y PARKER, J. (2009). Brock. Biology of microorganisms. 12th Ed. Pearson Prentice Hall. Madrid.
- PRESCOTT, L.M., HARLEY, J.P. y KLEIN, D.A. (2004). Microbiology 5th Ed. Mac Graw Hill. Madrid.
- INGRAHAM, J. L. y INGRAHAM, C.A. (1998). Introduction to Microbiology. Reverté Editions. Barcelona.
- SHORS, T. 2010. Viruses. Molecular Study with clinical orientation. Médica Panamericana Editions. Madrid.
- MENSA, J., GATELL, J. GARCÍA SANCHEZ, J., LATANG, E., LÓPEZ SUÑÉ, E. y MARCO, F. 2013 Guía terapéutica antimicrobiana. Editorial Antares, Barcelona. España

#### **Complementary Bibliography:**

- MIMS, C., DOCKRELL, H.M., ROITT, I. WALKELIN, D., ZUCKERMAN, M. (2004). Medical Microbiology 3<sup>rd</sup> Ed. Elsevier Mosby. Spain.
- MURRAY, P.R., ROSENTHAL, K.S., KOBAYASHI, G.S., PFALLER, M.A. (2002). Medical Microbiology. 4th Ed. Mosby, España.
- STRUTHERS, J.K., WESTERN, R.P. (2005) Bacteriología clínica. Masson, Barcelona
- TORTORA, G.J., FUNKE, B.R., CAE, C.L. (2007) Introduction to Microbiology. 9th Ed. Panamericana Editions. Buenos Aires. Argentina
- GILGERT, D.N., MOLLERING, R.C., ELIOPOLUS, G.M., CHAMBERS, H.F. y SAAG, M. 2013. The Sanford guide for the antimicrobial treatment 43th Ed (<http://webedition.sanfordguide.com>)

### **RECOMMENDED INTERNET LINKS**

Institute of Health Charles III: [http://www.isciii.es/htdocs/centros/epidemiologia/epi\\_sim.jsp](http://www.isciii.es/htdocs/centros/epidemiologia/epi_sim.jsp)  
Control and prevention of infectious diseases center, CDC, (EEUU): <http://www.cdc.gov/spanish/>  
Practice online of Microbiology for pharmaceutics: <http://www.pomif.com/>  
Harrison Medicine. Infectious Disease: <http://www.harrisonmedicina.com/recursos.aspx?resourceid=106>  
Spanish Society of Microbiology (SEM): <http://www.semicrobiologia.org/>  
International Committee of Viral Taxonomy: <http://www.ictvdb.org/>  
History of Microbiology: <http://www.historiadelamicrobiologia.es>

