

Undergraduate Programme in Biology

Telp : +62274 519739
Email : biol@uin-suka.ac.id
Website : <http://biologi.uin-suka.ac.id/>

MODULE HANDBOOK

Module Name	Bacteriology														
Module level, if applicable	Bachelor														
Code, if applicable	BIO425027														
Subtitle, if applicable	-														
Courses, if applicable	-														
Semester(s) in which the module is taught	5 th (fifth)														
Person responsible for the module	Dr. Arifah Khusnuryani, M.Si														
Lecturer(s)	Agessty Ika Nurulita, M.Sc; Lela Susilawati, Ph.D														
Language	Indonesia														
Relation to curriculum	Elective course in the third year (5 th semester) Bachelor Degree														
Type of teaching, contact hours	100 minutes lectures, 120 minutes structured activities, 120 minutes self-learning and 170 minutes practical lab per week.														
Workload	Total workload = 136 hours/semester (total for 16 weeks/semester, including mid-term and final term) Lectures = 100 minutes/week Structured activities. = 120 minutes/week Self-learning. = 120 minutes/week Practical lab. = 170 minutes/week														
Credit points	3 credits (4,5 ECTS)														
Requirements according to the examination regulations	Minimal attendance 75%;														
Recommended prerequisites	No prerequisites stated on														
Module objectives/intended learning outcomes	After completing this course, the students: 1. able to describe bacteria based on morphology, physiology, and biochemistry character 2. able to describe the concept of bacterial inhibition growth by antibacterial substances 3. able to analyse physiology and genetic factor of bacteria and the role of bacteria in nature														
Content															
Study and examination requirements and forms of examination	The final mark will be weighted as follows: <table><tr><th>NO</th><th>Assessment methods (components, activities)</th><th>Weight (percentage)</th></tr><tr><td>1</td><td>Final Examination</td><td>40%</td></tr><tr><td>2</td><td>Mid-Term Examination</td><td>30%</td></tr><tr><td>3</td><td>Class Activities : Quiz, Homework, etc.</td><td>30%</td></tr></table>			NO	Assessment methods (components, activities)	Weight (percentage)	1	Final Examination	40%	2	Mid-Term Examination	30%	3	Class Activities : Quiz, Homework, etc.	30%
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	The final assessment is expressed in the form of a letter value converted from a number value with the following categories: <table><tr><th>NO</th><th>Number Value</th><th>Letter Value</th><th>NO</th><th>Number Value</th><th>Letter Value</th></tr><tr><td>1</td><td>≥ 95</td><td>A</td><td>7</td><td>65-69.99</td><td>B/C</td></tr><tr><td>2</td><td>90-94.99</td><td>A-</td><td>8</td><td>60-64.99</td><td>C+</td></tr><tr><td>3</td><td>85-89.99</td><td>A/B</td><td>9</td><td>55-59.99</td><td>C</td></tr><tr><td>4</td><td>80-84.99</td><td>B+</td><td>10</td><td>50-54.99</td><td>C-</td></tr><tr><td>5</td><td>75-79.99</td><td>B</td><td>11</td><td>55-34.99</td><td>D</td></tr><tr><td>6</td><td>70-74.99</td><td>B-</td><td>12</td><td><35</td><td>E</td></tr></table>	NO	Number Value	Letter Value	NO	Number Value	Letter Value	1	≥ 95	A	7	65-69.99	B/C	2	90-94.99	A-	8	60-64.99	C+	3	85-89.99	A/B	9	55-59.99	C	4	80-84.99	B+	10	50-54.99	C-	5	75-79.99	B	11	55-34.99	D	6	70-74.99	B-	12	<35	E
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Media employed	White-board, LCD Projector, e-learning (https://daring.uin-suka.ac.id/)																																										
Reading list	1. Michael T. Madigan, Kelly S. Bender, Daniel HB., Matthew Sattley, David, A.Stahl. 2019. Brock Biology of Microorganisms. 15th edition. Pearson Education. London. 2. Cappuccino James G, Welsh C. 2018. Microbiology A Laboratory Manual. Pearson Education. London 3. Talaro Kathleen P, Talaro A. 2002. Foundations in Microbiology. The McGraw-Hill Companies. 4. Larry S, Joseph E.Peters, Tina M. Henkin, Wendy C. 2013. Molecular Genetics of Bacteria. 4th edition. ASM Press. America 5. Schweizer, H. P. (2008). Bacterial genetics: Past achievements, present state of the field, and future challenges. <i>BioTechniques</i>, 44(5), 633–641. https://doi.org/10.2144/000112807 6. Susilawati, L., Iwai, N., Komatsu, K., & Arie, T. (2021). Antifungal activity of bacteria isolated from Japanese frog skin against plant pathogenic fungi. <i>Biological Control</i>, 153, 104498. https://doi.org/10.1016/j.biocontrol.2020.104498 7. Tshikantwa, T. S., Ullah, M. W., He, F., & Yang, G. (2018). Current Trends and Potential Applications of Microbial Interactions for Human Welfare. <i>Frontiers in Microbiology</i>, 9, 1156. https://doi.org/10.3389/fmicb.2018.01156																																										

PLO and CO Mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11
CO 1				√							
CO 2					√						
CO 3					√						