MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS NEGERI SURABAYA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
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Master Program of Science Education **Module Handbook**

Module Name :	*Kajian Sains Biologi III/* *Study of Biological Science III*)*
Module level :	*Master Program of Science Education*
Course Code :	*8410103067*
Abbreviation, if applicable:	*-*
Courses included in the module, if applicable:	*Not Applicable*
Semester/Term	*1st /Second Year*
Module coordinator(s)	*Prof. Dr. dr. Tjandra Kirana,M.S., Sp.And*
Lecturer(s):	*Prof. Dr. dr. Tjandra Kirana,M.S., Sp.And*
Language:	*Indonesian Language*
Classification within the curriculum:	*Compulsory/ ~~Elective~~*
Teaching format/class hours per week during the semester:	*2 contact hours of lectures (Indonesia credit semester or CU*)*
Workload :	*2 x 50 minutes lectures, 2 x 90 minutes structured activity, 2 x 100 minutes individual activity, 14 weeks per semester, 112 total hours per semester ~ 4.48 ECTS***
Credit Point:	*2 CU (4.48 ECTS)*
Requirements:	
Learning goals/competencies:	**Knowledge (KNO-2)** **CLO-1** *Mastering knowledge and technology to study the community and its environment through the study of Animal Structure and Function.* *CLO-2* *Mastering the concepts associated with the structure and processes occurring in the animal's body.* *CLO-3* *Mastering the concepts associated with the structure and processes occurring in the animal's body.* **Competency (COM-3)** *CLO-4* *Creating the results of the study of animal structure and function literature.* *CLO-5* *Design of literature studies as a source of evidence / character related to animal structure and function studies.*
	This course examines the theory and relates it to processes in daily

<table>
<tr><td>Content</td><td>life that occur in the animal and human body related to the flow of matter and energy, membrane transport, nerves, senses, hormones, locomocy, transportation, respiration, digestion, thermoregulation, excretion, and osmoregulation. This subject is presented through a comparative approach, discussion, and assignment in the form of papers and / or presentations.</td></tr>
<tr><td>Attribute Soft skill:</td><td>Scientific report, public speaking, and team work</td></tr>
<tr><td>Study/exam achievements:</td><td>Students are considered to be competent and pass if at least get 70. Final score is calculated as follows: 20% Participation + 30% Assignment + 20% Middle Exam (UTS) + 30% Final Exam (UAS)
Final index is defined as follow:
<table>
<tr><th>Index</th><th>Converted Score</th><th>Score Range</th></tr>
<tr><td>A</td><td>4.00</td><td>85 ≤ A ≤ 100</td></tr>
<tr><td>A-</td><td>3.75</td><td>80 ≤ A- < 85</td></tr>
<tr><td>B+</td><td>3.50</td><td>75 ≤ B+ < 80</td></tr>
<tr><td>B</td><td>3.00</td><td>70 ≤ B < 75</td></tr>
<tr><td>B-</td><td>2.75</td><td>65 ≤ B- < 70</td></tr>
<tr><td>C+</td><td>2.50</td><td>60 ≤ C+ < 65</td></tr>
<tr><td>C</td><td>2.00</td><td>55 ≤ C < 60</td></tr>
<tr><td>D</td><td>1.00</td><td>40 ≤ D < 55</td></tr>
<tr><td>E</td><td>0.00</td><td>0 ≤ E < 40</td></tr>
</table></td></tr>
<tr><td>Learning Methods :</td><td>Case Method, Discussion, and Article Review</td></tr>
<tr><td>Form of Media:</td><td>Power Point slides, e-book file, and multimedia.</td></tr>
<tr><td>Literature (primary references):</td><td>1. Auderisk T, Auderisk G, Byers B,2011. Biology. Life on Earth. Edisi Kesembilan. San Fransisco: Pearson.
2. Hill RW, Wyse GA, dan Andreson M, 2012. Animal Physiology. Edisi Ketiga. Massachusetts: Sinauer.
3. Rastogi SC, 2007. Essential of Animal Physiology. Edisi Keempat. New Delhi: New Age International Ltd, Pub.</td></tr>
<tr><td rowspan="3">Notes:</td><td>*1 CU in learning process = three periods consist of: (a) scheduled instruction in a classroom (50 minutes); (b) structured activity (90 minutes); and (c) individual activity (100 minutes) according to according to Rector Decree of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2020</td></tr>
<tr><td>**1 CU = 2.24 ECTS according to Rector Decree of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2020</td></tr>
<tr><td>*Total ECTS = (total hours workload/ 60 min) / 25 hours
Each ECTS is equals with 25 hours</td></tr>
<tr><td>Last Amendment</td><td>5 January 2023</td></tr>
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