SYLLABI (Course Outline)

Faculty: Faculty of Mathematics and Science
Study Program: Biology
Course / Code: General Biology/ BIO151
Credit: Theory: 2  Practice: 1
Semester: 1
Prerequisite: -

I. Course Description
This course contains subject matters and topics for inductive activities more than only for deducto-verificative activities. Through this lecturing, students 1) identifying some biological objects on any level of life organization in around them; 2) finding some biological problems base on their observation; 3) doing problem solving through scientific methods; 4) comparing characteristics of an individual to others; 5) understanding principles of classification of organism; 6) Classifying organisms base on certain characteristic; 7) connecting specific characteristic of organism to their environment; 8) Connecting specific structure-function of organism to specific function of the organism; 9) simulating ratio of phenotype from crossbreeding; 10) understanding basic principles of adaptation on organisms; 11) understanding basic principles of evolution on organism.

II. Competences
Understanding biology as a knowledge; Understanding objects and problems of biology as a science; identifying unity and diversity of organism; understanding principles of classification of organism; connecting specific characteristic of organism to their environment; Connecting specific structure-function of organism to specific function of the organism; simulating ratio of phenotype from crossbreeding; understanding basic principles of adaptation on organisms; understanding basic principles of evolution on organism.
### III. Activity

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<th>Basic Competence</th>
<th>Essential Concept</th>
<th>Learning Strategy</th>
<th>Ref.</th>
<th>Character</th>
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<td>Biology as an inquiry</td>
<td>Discussion, references study, and assignment</td>
<td>A, C, E, F</td>
<td>Curiosity</td>
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<td>3</td>
<td>Understanding objects and problems of biology as a science</td>
<td>Objects and problems of biology as a science</td>
<td>Observation, reference study, and discussion</td>
<td>A, D, F</td>
<td>Curiosity</td>
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<td>4</td>
<td>Identifying unity and diversity of organism</td>
<td>Unity and diversity of organism</td>
<td>Observation, reference study, and discussion</td>
<td>A, B, D, F</td>
<td>Menghargai keberagaman</td>
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<td>5-6</td>
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<td>Principles of classification of organism</td>
<td>Observation, reference study, and discussion</td>
<td>A, B, F</td>
<td>Menghargai keberagaman</td>
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<td>7</td>
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<td>Organism and their environment</td>
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<td>Midterm test</td>
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<td>9-10</td>
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<td>11-12</td>
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<td>Sustainability in organism</td>
<td>Observation, reference study, and discussion</td>
<td>A, B, F</td>
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<td>Regulation and homeostasis in organism</td>
<td>Observation, reference study, and discussion</td>
<td>A, B, F</td>
<td>Discipline</td>
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<td>14</td>
<td>Understanding basic principles of adaptation on organisms</td>
<td>Adaptation on organisms</td>
<td>Observation, reference study, and discussion</td>
<td>A, B, F</td>
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<td>15-16.</td>
<td>Understanding basic principles of evolution on organism</td>
<td>Evolution on organism</td>
<td>Reference study, and discussion</td>
<td>A, B, F</td>
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References
- Compulsory

- Not Compulsory (Additional)

C. Techniques of Assessment and Final-Score
1. Written test (30%)
2. Performance assessment (20%)
3. Group Project (20%)
4. Assignment (20%)
5. Peer assessment (10%)

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