**SYLLABUS**

Faculty : Mathematics and Natural Sciences

Study Program : Biology Education

Course/Code : General Biology

Credit Unit : 2/1 sks

Semester : 1

Pre-requisite : -

Lecturer : Dr. Slamet Suyanto, M. Ed.

**Course desciption** :

 General Biology deals with the structure of biological science, including the objects, the method, and the themes of query, the product, and the careers of biology. This course also provides students with wide overview of BSCS (Biological Science Curriculum Study) and the works of biologists.

**Standard of Competence** :

1. To define biology as a science, including the objects, the method, the product, and the careers in biology.
2. To be able to use a scientific method and scientific process skills, including observation, measurement, using apparatus, constructing hypotheses, design an experiment, control variables, organizing data, and making conclusions.
3. To seach and to use important information related to biology by using ICT.

**Activity**:

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| **MEETING #** | **BASIC COMPETENCE** | **TOPIC** | **REFERENCE** |
| I | Learning ContractCourse outline | Learning ContractGroupingAssignment Distribution |  |
| II | Draw a structure of Biology as a science according to BSCS | Biology as a science | C |
| III | Observe living things, identify their characteristics, and classify into catagories  | The objects, classification, and themes of biology | A, B |
| IV-V | Design an observation and an experiment | Scientific Methods | D |

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| VI-VII | Do a scientific process skill and present the results | Science Process Skills:Observing, Compare and contrast, Classifying, measuring, searching information, Making hypotheses, design an experiment, Controling variables, organizing data, analysing data, drawing conclusions  | D |
| VIII | Midterm Exam |  |  |
| IX-X | Identify the characteristics of Biologists, attitudes, and their contribution  | The work of a biologist and his/her contribution to society | A, B |
| XII-XIII | Make a list of brances of biology and the object of study | Brances of Biology and the object of study  | A, B |
| XIII | Identify careers in biology | Careers in Biology | A, B |
| XIV-XV | Draw the advancement of Biology | New discoveries in biology | A, B |
| XVI | Final exam |  |  |

**Reference:**

A. Watkins, Patricia A. *et al*. 1994. *Life Science: Annotated Teacher’s edition*. Austin, TX.: Holt Rinehart & Winston.

B. Campbell, Neil A., Jane B. Reece, & Lawrence G. Mitchell. 1999. *Biology*. The Fifth edition. New York: Addison Wesly, Inc.

C. *BSCS: A science curriculum study*. 2009. *Biological Perspectives*. <http://www.bscs.org/curriculumdevelopment/>

D. Rezba, RJ. Et al. 1995. *Learning and Assessing Science Process Skills*. Dubuque, Iowa: Kendall/Hunt Publishing Coimpany.

**Evaluation :**

Assignment 30%

Midterm Exam 20%

Final Exam 20%

Participation 10%