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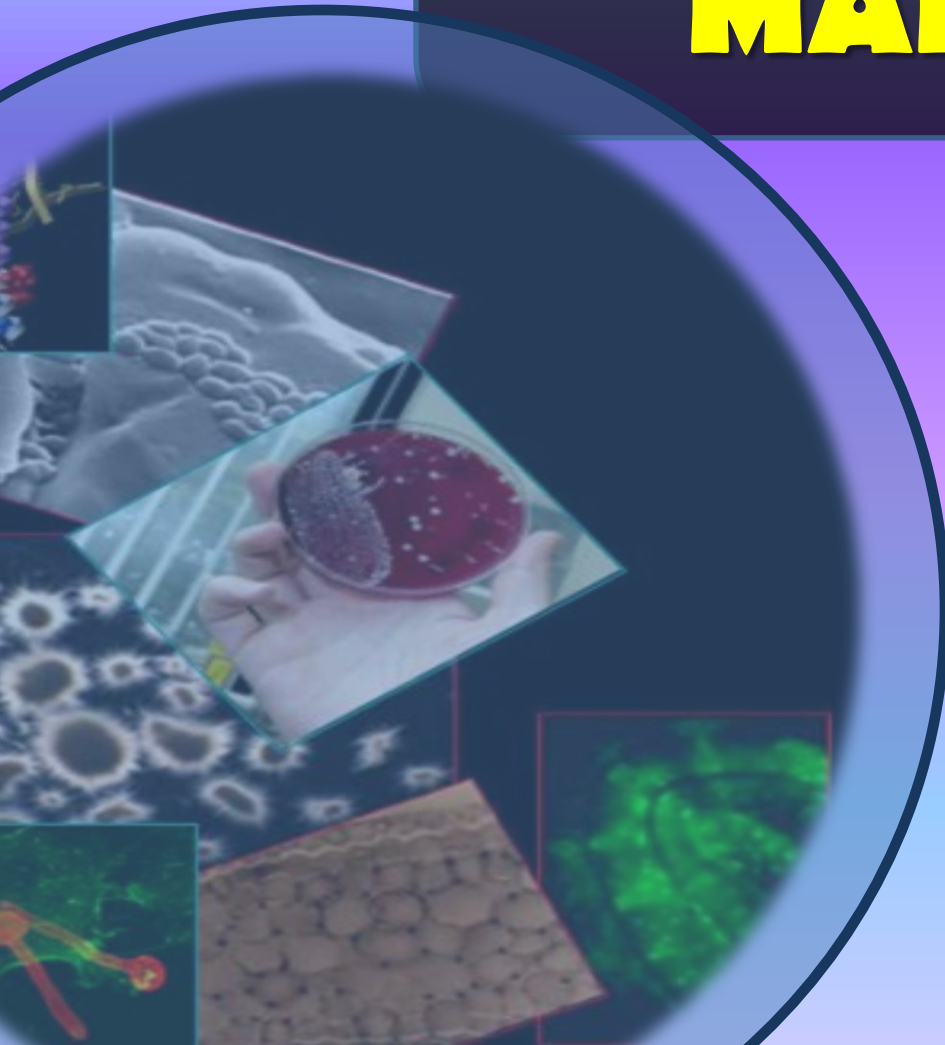


# **BIOLOGY**

## **MAB 1201/3 (2-1)**

**BIOLOGY TEAM**

**Agricultural Technology Faculty  
University of Brawijaya  
2014-2015**



# COURSE

- **Credit : 3 (2-1)**
- **Semester : 1 / 2**
- **Course format: Lecture (100 min per week) for 14 weeks and laboratory work (3 h per week) for 5 weeks**
- **Pre-requisite : -**
- **Number of students : ? divided into ? groups**

# LECTURER



**Rosalina Ariesta L  
(RAL)**



**Endrika  
Widyastuti (EWT)**



**Jaya Mahar  
Maligan (JMM)**

**A - D - G - J - Q Class**

# COURSE CONTRACT



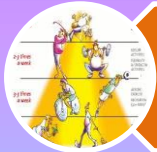
**Come on time**



**Silent your cell phone**



**Manage your tasks & assignment**



**Actively participate, Think creatively**



**Read, Read more and more**



**No plagiarism**

# LABORATORY RULES

- Attendance in all laboratory work is compulsory. For legitimate excuses, one may attend laboratory session in another group.
- Each student must use laboratory coats during laboratory work sessions.
- For advance preparation in laboratory work, each student must summarize analytical procedures in the form of flowchart and complete the pre lab (work sheets).

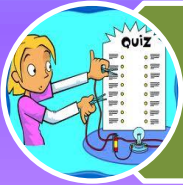
# STUDENT GROUPING

- **Students are divided into ? groups, each group consist of ? students.**
- **Students in each group will work as a team to conduct laboratory work.**
- **Each group must share the data among them, equally in the laboratory work.**
- **Look at laboratory manual about the sequence and schedule of your laboratory work for each laboratory session.**

# Score Grading



Assignment 20%



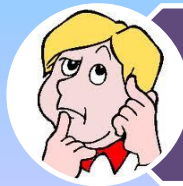
Laboratory Work 30%



Quiz 10%



Middle & Final Test 20%



Activity 20%



# Score Grading



Pre lab : 5%



Post test : 5%



Laboratory Activity : 15%



Laboratory Report : 5%

# GRADE SCORE

| Range   | Grade |
|---------|-------|
| >80-100 | A     |
| >75-<80 | B+    |
| >70-<75 | B     |
| >60-<70 | C+    |
| >55-<60 | C     |
| >50-<55 | D+    |
| >45-<50 | D     |
| <45     | E     |

**Cheating students will be punished with “E” grade**

# COURSE TOPICS

| Week | Topics                         | PIC  |
|------|--------------------------------|------|
| 1    | Introduction (Course Contract) | JMM  |
| 2    | Biological Materials           | RAL  |
| 3    | Cell : Structure and Function  | RAL  |
| 4    | Bioenergetic cell              | RAL  |
| 5    | Development of Cell            | RAL  |
| 6    | Organisms Classification       | RAL  |
| 7    | Atom Cycle                     | JMM  |
| 8    | Middle Test                    | Team |

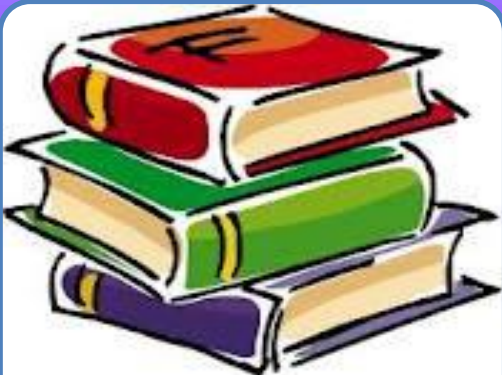
# COURSE TOPICS

| Week | Topics                                    | PIC  |
|------|---|------|
| 9    | Ecology (Biotic and Abiotic)              | JMM  |
| 10   | Biodiversity                              | JMM  |
| 11   | Plants and Agricultural Technology        | JMM  |
| 12   | Animals and Agricultural Technology       | EWT  |
| 13   | Microorganism and Agricultural Technology | EWT  |
| 14   | Gene : Structure and Function             | EWT  |
| 15   | Biotechnology                             | EWT  |
| 16   | Final Test                                | Team |

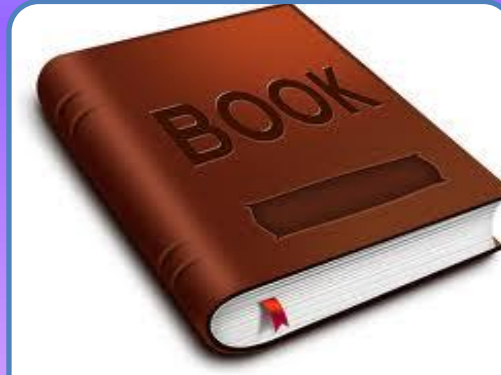
# LABORATORY WORK

| Week | Topics  |
|------|---|
| 1    | Microscope and calibration of micrometer          |
| 2    | Identification of Microorganism Morphology Colony |
| 3    | Cell : Plant Tissue                               |
| 4    | Cell: Animal Tissue                               |
| 5    | Respiration and Photosynthesis                    |
| 6    | Aquatic Biodiversity                              |
| 7    | Interaction Biotic and Abiotic (Ecology)          |

# REFERENCES



Campbell &  
Reece



Miller &  
Levine



Article, web,  
other

N.A Campbell and J.B. Reece. 2005. Biology. Benjamin Cummings  
K.R. Miller and J. Levine. 2008. Biology. Pearson Prentice Hall

# DOWNLOADED COURSE

The course can be downloaded by using the following address :

- [endrikawidyastuti.wordpress.com](http://endrikawidyastuti.wordpress.com)
- [maharajay.lecture.ub.ac.id](http://maharajay.lecture.ub.ac.id)
- [thpunibraw@yahoo.com](mailto:thpunibraw@yahoo.com)
- [e-tp.ub.ac.id](http://e-tp.ub.ac.id)

# Assessment Tools

- Homework/assignments.
- Group assignment
- Oral presentation
- Quiz
- Activity during course and lab work
- Midterm and final test



**T h a n k s**