

**MBG 111**

**Biology Laboratory Manual**

**2024-2025**

**Lecturer:**

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**Assistants:**

**Emine Beyza DOĞAN, PhD Student**

**Zehra Elif GÜNYÜZ, PhD Candidate**

**Eda EFE SÖZEYATAROĞLU, PhD Candidate**

**Buket SAĞLAM, PhD Student**

Lab No	Date	Subject	Report date
Laboratory 1	30.09.2024	Introduction and safety procedures (all)	-
Laboratory 2	07.10.2024	Microscopy (BUKET)	Report 1: 14.10.2024
Laboratory 3	14.10.2024	Measuring Techniques (EDA)	-
Laboratory 4	21.10.2024	Aseptic technique and bacterial growth measurement (BEYZA)	Homework 1: 28.10.2024
Laboratory 5	28.10.2024	Organic Molecules (ELİF)	Report 2: 04.11.2024
Laboratory 6	04.11.2024	Osmosis and Diffusion (BUKET)	Report 3: 11.11.2024
Laboratory 7	11.11.2024	Mitosis (ELİF)	-
Laboratory 8	18.11.2024	Meiosis (EDA)	Homework 2: 25.11.2024
Laboratory 9	25.11.2024	Genomic DNA isolation (BEYZA)	-
Laboratory 10	02.12.2024	Gel Electrophoresis (BEYZA)	Report 4: 09.12.2024
Laboratory 11	09.12.2024	Photosynthesis (BUKET)	Report 5: 16.12.2024
Laboratory 12	16.12.2024	Fermentation (EDA)	Report 6: 23.12.2024
Laboratory 13	23.12.2024	Enzymes (ELİF)	Homework 3: 30.12.2024
Laboratory 14	30.12.2024	All Subject	-
Final	<b>13.01.2025</b>	<b>Final</b>	-

**Textbook** : Campbell Biology (Reece, Urry, Cain, Wasserman, Minorsky, Jackson ed 10th, ISBN-13:978-1-292-00865-3). Check the course website at CMS (course management system, <https://cms.iyte.edu.tr/>)

**Attendance** : 80% attendance is required to pass the course. No excuse accepted unless there is severe sickness or death in the immediate family members, which must be officially documented.

**Academic honesty:** Absolutely zero tolerance for cheating in the exams, which will result in automatic failure.

<b>Grading</b> :	Report	45%
	Quiz	25%
	Final Exam	15%
	In-lab participation	10%
	Notebook	5%

## **MBG 111 Biology I Laboratory Syllabus (Monday Quiz&Lesson; 13.30-13:45, Lab section; 14:00-17:00)**

### **Hours:**

13.30-14.00 Quiz + Summary of Lecture

14.00-17.00 Lab-section 1

### **Quizzes:**

You are expected to read the materials and methods for each week thoroughly before you come to the lab. You will be given a quiz (4-6 questions: test, short-answer or written) at the beginning of each lab section. Following the quiz, your assistants will give you a presentation to overview the experiments and highlight the important points. Thus, **it is highly important to come to the labs prepared!!!**

### **In-lab participation:**

Your assistant will monitor every student in his/her section during the experimental part. Based on students' participation, each student will get a grade. The more you ask/participate, the higher grade you are likely to get!!!

### **Lab Notebook:**

You will be explained how to maintain a nice and clean scientific lab notebook. Your assistant will check your lab notebook at the end of each lab section. **It is your responsibility to have your assistant see your lab notebook** before you leave the lab upon the completion of the experiments.

### **Lab Safety:**

Please pay utmost attention to lab safety issues as explained to you in the first lab. It is absolutely mandatory:

1. To wear a lab coat throughout the lab at all times
2. To wear gloves at all times
3. To remove the gloves while taking notes or talking on the phone
4. Not to touch benches, walls, or other places while wearing gloves
5. To wear pants (rather than shorts or skirts)
6. To wear shoes (minimize skin exposure)
7. To put together hair if too long
8. To avoid touching, tasting, or sniffing any chemicals/solutions unless you are told

9. To warn your assistant in due time if you have a medical issue that requires special attention
10. Leave your bench clean before you leave the lab

### **ACADEMIC HONESTY:**

There is absolutely no tolerance for cheating in the exams, which will result in the **automatic failure with no questions asked** ! The cheaters will be forwarded to the Dean's Office, if necessary, for further investigation (See "Yükseköğretim Kurumları Öğrenci Disiplin Yönetmeliği Madde 9m").

### **PLAGIARISM ([www.plagiarism.org](http://www.plagiarism.org))**

1. To steal and pass off (the ideas or words of another) as one's own
2. To use (another's production) without crediting the source
3. To commit literary theft
4. To present as new and original an idea or product derived from an existing source

### **Examples of Plagiarism:**

1. Copying words or ideas from someone else without giving credit
2. Failing to put a quotation in quotation marks
3. Giving incorrect information about the source of a quotation
4. Changing words but copying the sentence structure of a source without giving credit

**Copying so many words or ideas from a source that it makes up the majority of your work, if not all, whether you give credit or not**

### **How to Avoid Plagiarism:**

1. Write the statements in your own words and credit the source! Short statements can be presented in quotation marks as long as fairly used and credited
2. Those who plagiarize get a ZERO in the first event, one-grade downgrading in the 2nd event and two-grade downgrading in 3 events
3. I hereby confirm that I have completely read and understood all the aforementioned statements, and thus readily accept the consequences of my actions.