MBG101 Biology I

Mon. 10:45-12.30 am (G209); Thur. 15.30-17.15 pm (G209)

Instructor : Prof. Bünyamin Akgül **Office** : MBG, Room #D-107, Phone# (232) 750 7316
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Office hours : Monday, 08.45 in the office or Wednesdays, 13.00 at the Canteen at the Classrooms Building
Textbook : Campbell Biology (Urry,Cain,Wasserman,Minorsky,Orr ed 12th, ISBN-13: 978-0135988046). Older versions are also acceptable.
Attendence : 70% attendance is required to pass the course. You will earn bonus credit (up to 2.5 pts) for every class attended for the remaining 30%. No make-up exams unless the excuse (e.g. severe sickness or a death in the immediate family members) for missing the exam is officially documented.
Academic honesty: ***Absolutely zero tolerence*** for cheating in the exams, which will result in automatic failure.
Content : This course will cover the complex biological molecules and cellular structures and make freshmen students familiar with the underlying concepts of biological processes such as metabolism, inheritance, and cell communication at both molecular and cellular levels.

Objectives :1.To ensure that students understand the theory and basic principles of biological research and scientific techniques; 2.To enable students to learn the characteristics of important elements in the world of biology and of molecules consisting of a combination of these elements; 3.To ensure that students comprehend the characteristics of the organisms and the structural elements; 4.To ensure that students understand and learn basic knowledge related with the features of organisms, structures and functions; 5.To ensure that students understand and learn the biological events that occur in organisms at the molecular level like DNA replication, protein synthesis, etc.

Grading	:	Homework	5 %	Midterm Exam I	27,5 %
		Midterm Exam II	27,5 %	Final Exam	40 %

Grades will NOT be curved !!

90-100	AA	4.0	I Incomplete
85-89	BA	3.5	S Satisfactory
80-84	BB	3.0	U Unsatisfactory
75-79	CB	2.5	P Progressing
70-74	CC	2.0	EX Exempt
65-69	DC	1.5	NA Non Applicable
60-64	DD	1.0	W Withdraw
50-59	FD	0.5	
49 –	FF	0	

Date	Reference		
09/30	Class overview Chapters 2: Chemical Context of Life Chapter 3: Water and Life	10/03	Chapter 3: Water and Life Chapter 4: Carbon and Molecular Diversity of Life
10/07	Chapter 4: Carbon and Molecular Diversity of Life Chapter 5: Structer and Function of Large Biological molecules	10/10	Chapters 5 Chapter 6: A Tour of the Cell
10/14	Chapters 6 Chapter 7: Membrane Structure and Function	10/17	Chapter 7
10/21	Chapters 7 **HW1 Due in class**	10/24	Chapters 7 Chapter 8: Introduction to Metabolisn
10/28	Chapter 8: Introduction to Metabolisn	10/31	Chapters 9: Cellular Respiration and Fermentation
11/04	**Midterm I**	11/7	Chapters 9: Cellular Respiration and Fermentation
11/11	Chapter 10: Photosynthesis	11/14	Chapter 10: Photosynthesis
11/18	Chapters 11: Cell Communication	11/21	Chapter 11 Chapter 12: Cell Cycle
11/25	Chapter 12: Cell Cycle	11/28	Chapter 13: Meiosis and Sexual Life Cycles Chapter 14: Mendel and the Gene Idea
12/02	Chapter 14: Mendel and the Gene Idea	12/05	Chapter 15: Chromosomal Basis of Inheritance
12/09	Chapter 15 Chapter 16: Molecular Basis of Inheritance	12/12	Chapter 16: Molecular Basis of Inheritance
12/16	**Midterm II**	12/19	Chapter 17: Gene Expression
12/23	Chapter 17: Gene Expression	12/26	Chapter 17: Gene Expression Chapter 18: Regulation of Gene Expression
12/30	Chapter 18: Regulation of Gene Expression	01/02	Chapter 18: Regulation of Gene Expression
01/06 MONDAY FINAL EXAM			

Be sure to alert me or other lecturers by October 14, 2024 in cases of conflicts in exam dates. Otherwise exams will NOT be postponed or rescheduled !!!

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)

1. To steal and pass off (the ideas of 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 quatation
4. Changing words but copying the sentence structure of a source without giving credit
5. **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

Those who plagiarize get a ZERO in the first event, one-grade downgrading in the 2nd event and two-grade down grading in 3 events
I hereby confirm that I have completely read and understood all the aforementioned statements, and thus readily accept the consequences of my actions.

HOMEWORK ASSIGNMENTS:

HW: Aim: To be acquainted with the research areas in the Department.

1. Visit the departmental website and select a faculty member whose research area sounds interesting to you (Qualified interviewee: a PhD scientist). Feel free to interview as many professors (as a group) but write your report on one of the professors you have interviewed.
2. Ask your classmates to find out who else is interested in interviewing the professor you have selected.
3. As a group (everyone who is interested in an interview with the same professor), make an appointment with the professor or someone s/he might assign for the interview
4. Have an interview with the professor about his/her career development and research area (his/her aspirations to pursue a PhD degree, challenges along the way, current status, future plans/directions, any suggestions to a prospective PhD candidate). (**preferably online**)
    a. You may prepare a list of questions to ask as a group.
    b. Alternatively, each student may prepare questions of his/her own.
5. Maximum 2 pages, 1.5 space, 12 Font Times New Roman, No references, no cover page, make sure to include your name and ID.
6. Each student is to write a report **individually** although the same questions may be asked to the professor.
    a. You might prepare the report as a story or in the format of Q/A (at least 5 question/answer or concepts).
    b. Make sure to indicate/explain why you have selected the professor you plan to include in your final report
    c. Make sure that you **include a paragraph at the end**, (a) discussing your impressions/thoughts on the interview (what has stricken your attention the most, anything that has broaden your horizon, anything unexpected or how you can benefit from this interview..etc) and (b) what you would do differently if you were in place of your professor (**MANDATORY**).
    d. You are allowed to interview as many as you like, but you can report only one of those interviews that impresses you the most. **Due in class.**

Homework Grading:

Content	: 50 pts
Clarity/originality	: 10 pts
Conclusive paragraph	: 20 pts
Rationale for selection	: 10 pts
Format	: 10 pts

p.s. Late turn-ins are acceptable only on the same day until 17.00 pm with a 50% reduction.