

Course E-Syllabus

1	Course title	Environmental pollution
2	Course number	5501362
3	Credit hours	3
	Contact hours (theory, practical)	theory
4	Prerequisites/corequisites	non
5	Program title	Biology
6	Program code	550
7	Awarding institution	Faculty of Basic Science and Marine
8	School	
9	Department	Marine Biology
10	Level of course	3rd
11	Year of study and semester (s)	Autumn Term
12	Final Qualification	
13	Other department (s) involved in teaching the course	none
14	Language of Instruction	English
15	Teaching methodology	<input type="checkbox"/> Blended <input checked="" type="checkbox"/> Online
16	Electronic platform(s)	<input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input checked="" type="checkbox"/> Zoom <input type="checkbox"/> Others.....
17	Date of production/revision	

18 Course Coordinator:

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19 Other instructors:

Name:
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Phone number:
Email:

Name:
Office number:
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Email:

20 Course Description:

As stated in the approved study plan.

This is a reading-intensive course designed for advanced undergraduate students interested in environmental pollution.

21 Course aims and outcomes:

A- Aims:

The objective of the course is for students to understand pollution (theory), the potential environmental impacts on people and economy.

General principles and practices will be covered first, followed by lectures on specific topics on individual pollutants that affect the environment.

Lecture outlines will be based primarily but not exclusively on the content of a class textbook (additional readings are required).

Students will be expected to independently study all required readings. Optional extra credit will be available. Students enrolling in this course are expected to have prior knowledge of basic biology and chemistry and ecology.

B- Intended Learning Outcomes (ILOs):

Upon successful completion of this course, students will be able to: Understand the following points:

1. The history and concept of pollution and its future outlook;
2. The principles and types of pollutions
3. The important and sensitive areas that is most vulnerable to pollution
4. The general concepts understanding pollution and its prevention
5. The environmental and ecological concerns associated with marine pollution.

22. Topic Outline and Schedule:

Week	Lecture	Topic	Teaching Methods*/platform	Evaluation Methods**	References
1	1.1	History about pollution and identification	Zoom	Discussion, oral examination, and presentations	
	1.2.	Types Of Pollution	Zoom		
	1.3.	Types Of Pollution	Zoom		
	1.4.	Sources and Causes of Environmental Pollution	Zoom		
	1.5	Marine Pollutions	Zoom		
2	2.1	<u>Pathways of pollution</u>	Zoom		
	2.2	<u>Ship pollution</u>	Zoom		
	2.3	the Ballast Water Management Convention	Zoom		
2	2.4	<u>Oil spills</u>	Zoom		
2	2.5	<u>Atmospheric pollution</u>	Zoom		
3	3.1	<u>Deep sea mining</u>	Zoom		
	3.2	<u>Acidification</u>	Zoom		
	3.3	<u>Acidification</u>	Zoom		
	3.4	<u>Eutrophication</u>	Zoom		
	3.5	<u>Eutrophication</u>	Zoom		
4	4.1	<u>Plastic debris</u>	Zoom		
	4.2	<u>Plastic debris</u>	Zoom		
	4.3	Toxic Chemicals and Toxins	Zoom		
	4.4	<i>Polycyclic Aromatic Hydrocarbons</i>	Zoom		
	4.5	factors strongly influence the body burdens of PAHs in these organisms			
5	5.1	<i>Halogenated Hydrocarbons</i>	Zoom		

	5.2	Heavy Metals	Zoom	Discussion, oral examination, and presentations
	5.3	Heavy Metals		
	5.4	Radioactive Substances		
	5.5	Radioactive Substances	Zoom	
6	6.1	Noise pollution	Zoom	
	6.2	Eutrophication's	Zoom	
	6.3	Prevention policy of Eutrophication's		
	6.4	Algal bloom and Red tides		
	6.5	Hypoxia	Zoom	
7	7.1	Oil Pollution (Oil spills)		
	7.2	Cleanup and recovery from an oil spill		
	7.3	Marine debris	Zoom	

- Teaching methods include: Synchronous lecturing/meeting; Asynchronous lecturing/meeting
- Evaluation methods include: Homework, Quiz, Exam, pre-lab quiz...etc

23 Evaluation Methods:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	Period (Week)	Platform
Discussion, oral examination, and presentations	5	Of the Week1	1	Google form
Discussion, oral examination, and presentations	5	Of the Week2	2	Google form
Discussion, oral examination, and presentations	5	Of the Week3	3	Google form
Discussion, oral examination, and presentations	5	Of the Week4	4	Google form
Mid-term	30	Of the Week6	6	Google form
Final exam	50	All chapters		At university or online using Google form

24 Course Requirements (e.g: students should have a computer, internet connection, webcam, account on a specific software/platform...etc):

a computer, internet connection, webcam, account on a specific software/platform

25 Course Policies:

A- Attendance policies: The course will follow the attendance policy of the University. Class attendance will be recorded and will count towards grade. However, regular attendance is critical to the learning success of students. In addition, graded quizzes will not be announced and if a student misses lectures where quizzes are given, he/she will earn 0 points for each missed quiz (see Grading). Therefore, students are strongly advised to attend all lectures. Make-up exams or quizzes may be given for absences due to medical reasons, but only if a signed physician's note is provided on official stationery that includes the physician's contact information. Make-up exams or quizzes may also be given for absences due to extraordinary nonmedical reasons (e.g., scheduling conflicts with other class field trips, etc.), but only if the student lets the instructor know of the anticipated absence in advance and provides adequate proof of the scheduling conflict. In the event the instructor is late to class without prior notice, students should wait a minimum of 10 minutes before leaving the classroom. It is the responsibility of students who miss any lectures to ensure that they have knowledge of the material covered during the missed lectures and of all assigned readings. Office hours will not be used to re-teach the content of missed lectures.

B- Absences from exams and submitting assignments on time: restricted, the student should restrict to the time of exam and homework's submission.

C- Health and safety procedures: on line teaching, no health and safety during the lectures but if the final exam will be in the University then safety and health precautions should be taken.

D- Honesty policy regarding cheating, plagiarism, misbehavior: students should follow the instructions and policy regarding cheating, plagiarism, misbehavior.

E- Grading policy: There will be one written exam (final). The final exam will be comprehensive and will cover all course material. Final exam will worth a total of 5 % exam points. At least five pop quizzes will be given over the semester to worth points of a total of 20 points, homework's and contributions and active participation of 30 points.

F- Available university services that support achievement in the course: e-learning platform.

26 References:

A- Required book(s), assigned reading and audio-visals:

Any books, videos, linkage and y-tubes taking about the Environmental pollution

B- Recommended books, materials and media: **Any books, videos, linkage and y-tubes taking about the Environmental pollutions.**

27 Additional information:

QF-AQAC-03.02.1.3

none

Name of Course Coordinator: ---Dr Wissam Yahia Hayek---Signature: ----- Date: 1-10-2020

Head of Curriculum Committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of Curriculum Committee/Faculty: ----- Signature: -----

Dean: ----- Signature: -----