



## BIOL-105 Syllabus

### Basic Course Information:

**Course Prefix/Number:** BIOL-105  
**Course Title:** Environmental Science  
**Core/Elective Course:** GenEd-Science Req  
**Class Meeting Times:** UTR 11:00 AM – 11:50 AM  
**Class Location:** Central Campus; CC016  
**Instructional Modality:** Hybrid (Online/Onsite)

**Instructor:** Dr Joelle Nader-Nasr  
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**Office Hours:** online appointments only; Monday and Wednesday 9:30AM-12:30PM

### AUK Mission Statement:

The American University of Kuwait is a liberal arts institution dedicated to teaching, learning, and scholarship. The University offers programs that provide students with the knowledge and skills necessary for lifelong learning and professional success. AUK enriches society by fostering an environment that encourages critical thinking, effective communication, personal growth, service, and leadership.

### Department Mission Statement:

The Department of Mathematics and Natural Sciences is committed to excellence in teaching, research, and scholarly activities. The Department prepares AUK students in different disciplines with the fundamental scientific and analytical skills critical to a quality liberal education. The department strives to prepare students to be successful in their careers and promotes lifelong learning.

### Catalog Course Description:

This introductory course addresses the relationship between human activity and the environment. Emphasis on ecosystems, energy flow and nutrient cycling, population dynamics, resource use and conservation, pollution, management and eradication of pollution, ethics, and the environment.

**Course Learning Outcomes:** Upon successful completion of the course, students will be able to:

Course Learning Outcomes (CLOs)
<b>CLO1:</b> Understand the natural environment and recognize the inter-relation among organisms and between organisms and the environment
<b>CLO2:</b> Understand the nature of the scientific inquiry and its limitations
<b>CLO3:</b> Explain common human impacts on the environment and resources, and how sustainability might be achieved.

### Course Delivery/Methodology:

The course content will be delivered in a hybrid model of education where students will alternate between studying online and on campus. Classes will meet 3 days per week. When students are attending online, classes will be broadcasted through **Zoom**. The **access link** to all the sessions will be posted on **Moodle**, which can be accessed [American University of Kuwait \(auk.edu.kw\)](http://American University of Kuwait (auk.edu.kw)). The material will be presented in lecture form and will be available on Moodle. During the course, you will have different types of evaluations including quiz, tests, assignments, and discussions. To complete the course successfully, you must participate in all course activities (group work, discussion boards...) and submit work by due dates and times.

### Required Textbook/Required Readings:

No textbook is required for this course. Each week you will find slides and recommended articles, websites and videos which are posted on Moodle.

The textbook used to prepare the course is the following:

***Environmental Science, Miller and Spoolman***, Thompson (Brooks/Cole), 15<sup>th</sup> Edition, 2016.

Related textbooks available in AUK library:

- Environmental science *14th ed., [International ed.]*. / G. Tyler Miller
- Environmental science : problems, concepts, and solutions *12th ed.* / G. Tyler Miller, Jr., Scott Spoolman.

### Evaluations and Grading:

Evaluation Type	Weight
Midterm Exam (1)	30%
Quiz (3)	15%
Group Presentation	15%
Final Exam (1)	35%
Participation	5%
<b>Total</b>	<b>100%</b>

**Midterm Exam:** The midterm exam will take place **onsite** during the **class time**. The exam will include different types of questions: multiple-choice, matching, fill-in-the blank, and short answer questions. The material covered and the dates are shown in the schedule at the end of the syllabus. During the exam time, when on-campus students are completing the exam, **off-campus** students will be engaged in **asynchronous learning**: they will have to complete a graded individual assignment that will count within the exam grade. ***Students will log into their Moodle accounts during their class-time and follow the assigned instructions.***

**Quiz:** There will be 3 fifteen minutes quiz that will cover lecture material and assigned reading and problems. The quiz will be composed of multiple-choice questions. It will take place on **Moodle** during the **class time**.

**Final Exam:** The final exam will take place during **the Final exams week**. It will be a combination of multiple choice and short answer questions. The assessment will be **comprehensive**, and it will cover the last chapters as well as important learning objectives. **Summary slides** will be available by the end of the semester to better prepare for the Final. More details regarding the material and the date of the assessment will be announced later.

**Group presentation:** Groups of **3 students** will choose a topic from the list of topics provided at the end of the syllabus. Students are expected to collect data, prepare a PowerPoint presentation or a short clip movie and present their project in the class at the end of the semester. More details are provided in *appendix 1 and 2* at the end of this syllabus.

**Participation:** Participation will take into consideration onsite and online (synchronous and asynchronous) work. The student is expected to:

- **Attend** classes regularly as per AUK's attendance policy (*see Attendance policy below*),
- Engage in **discussions** during sessions and forum discussions on Moodle,
- **Connect** with the teacher during the semester through virtual meetings and email,
- Submit **assignments** on time and on a regular basis.

#### AUK Official Grading Scale:

Letter Grade	Percentage	University Points
A	94-100	4.0
A-	90-93	3.7
B+	87-89	3.3
B	84-86	3.0
B-	80-83	2.7
C+	77-79	2.3
C	74-76	2.0
C-	70-73	1.7
D+	67-69	1.3
D	64-66	1.0
D-	60-63	0.7
F	0-59	0.0

#### AUK Attendance Policy:

Any student who misses more than 15% of class sessions of any course during a semester should expect to fail, unless she/he submits documented evidence to the course instructor of inpatient medical care, death of an immediate family member, academic instructional activities, or national athletic activities. If excused, students are required to satisfy all coursework due or assigned during their absence as determined by the course instructor. If a student does not submit documented evidence for her/his absence exceeding the limit, it is the student's responsibility to withdraw from the course by the specified deadline, as indicated on the academic calendar. Students who withdraw from a course receive a grade of "W". Students who do not withdraw from a course nor submit supporting documents for excessive absences will receive a grade of "FN" (failure for non-attendance).

AUK's attendance policy applies to eLearning:

- All Students whether on-campus or online are expected to be on time.
- Students attending classes online are allowed tardiness for up to 5 minutes due to technical issues.
- ***Students attending classes online must turn their cameras on at eye level, or risk being removed from the class session.***

### **Code of Academic Honesty and Integrity:**

Upon admission to the American University of Kuwait, students agree to act responsibly in all areas of academic, personal and social conduct and to take full responsibility for their individual and collective action. Such regulations are found in the American University of Kuwait Catalogue, Student Handbook, and the AUK website at [www.auk.edu.kw](http://www.auk.edu.kw). Any question of interpretation regarding the code of academic honesty and Integrity shall be reported to the appropriate academic dean. The Code shall be reviewed annually at the discretion of the academic deans. Any student or student organization found to have committed the cited violations or misconduct, either on or off campus, is subject to the disciplinary sanctions outlined in adjudication procedures.

- **Plagiarism:**

The term “plagiarism” includes, but is not limited to, an attempt of an individual to claim the work of another as the product of his or her own thoughts regardless of whether that work has been published. Plagiarism includes, but is not limited to, quoting improperly or paraphrasing text or other written materials without proper citation on an exam, term paper, homework, or other written material submitted to an instructor as one’s own work. Plagiarism also includes handing in a paper to an instructor that was purchased from a term paper service or downloaded from the Internet and presenting another person’s academic work as one’s own.

- **Cheating:**

The term “cheating” includes but is not limited to, copying homework assignments from another student; working together with another individual on a take-home test or homework when not approved by the instructor, looking at and/or copying text, notes or another person’s paper during an examination when not permitted to do so. Cheating also includes the giving of work information to another student to be copied and/or used as his or her own. This includes but is not limited to giving someone answers to exam questions either when the exam is being given or after having taken an exam; informing another student of specific questions that appear or have appeared on an exam in the same academic semester; giving or selling a term paper, report, project or other restricted written materials to another student.

Student Code of Conduct and Code of Academic Honesty and Integrity will be applied, in addition to the following specific to the hybrid model of education:

- Video recording of class sessions (by instructors and/or students) is prohibited and is a violation of the university codes.
- The privacy of the session is to be maintained (no other members of the household should be available during the sessions).
- Professional physical appearance is expected during online classes. All participants in the online class should ensure proper attire and setting (blurred background can be used to accommodate settings).
- Copyright as well as intellectual property rules and regulations apply.
- ***MASKS are to be worn properly all the time when on campus grounds. Repeated violations of the MASK policy will result in removal from class and/or campus.***

## Academic Support:

Learning Support Services focuses on empowering students to become independent and successful learners by developing their literacy skills, enhancing their understanding, and helping them improve their academic and study skills. Learning Support Services is comprised of two centers: the Tutoring Center and the Writing Center. The Tutoring Center provides free academic support in various subjects to AUK student. Email: [tutoringcenter@auk.edu.kw](mailto:tutoringcenter@auk.edu.kw).

The Writing Center provides multilingual support (English, Arabic, French, and Spanish) through individual or small-group consultations. Email: [writingcenter@auk.edu.kw](mailto:writingcenter@auk.edu.kw)

## Disability Accommodations:

AUK provides equal and inclusive educational environment in order to enable all students to meet and perform requisite academic standards and to participate in the opportunities and activities of its community. If you believe you can benefit from accommodations for a learning, physical, or mental health disability, [click here to book a session through the Counseling Center/Disability Services Booking Page](#), to ask about disability services at AUK, initiate an accommodation plan, or receive disability services. You can also email [counseling@auk.edu.kw](mailto:counseling@auk.edu.kw) if you need assistance in booking a session.

## Course Policies/Student Responsibilities:

To participate in one of AUK's hybrid courses, you need this technology:

- A computer/laptop capable of running Windows 10 or later, or MAC OS X
  - Please note that other electronic devices such as tablets or phones may function for attending Zoom sessions. However, they are not recommended for typing (assignments, discussion board, using chat feature etc.).
- The latest version of Firefox, Chrome, Microsoft Edge, Internet Explorer, or Safari
- **Microsoft Office Suite** or a compatible Open Office Suite
- Adobe Acrobat Reader or other applicable **PDF reader**
- **Webcam** or other built-in camera on laptops, tablets, or phones
- **Microphone** or other built-in microphones on laptop, tablets, or phones

## Late and Missing Work Policy:

If any student fails to submit an assignment on the due date for a valid reason, the student may still hand it within the next few days, prior to solutions being out in class, with a **deduction of 25%** of the grade.

## Communication Policy:

Please be sure to use your **AUK official email**, **write your full name** and indicate which **class** and **section** you are taking (ex. BIOL-105-01) when you send me an email. If you have a question, please check the syllabus first and if your question is not answered there, then please feel free to send an email, during working hours, and I will be happy to clarify. I will do my best to respond within 48 hours of receiving your email. ***Please note that emails sent on weekends might be responded to on Sunday.***

## Technology Issues:

In this class, all assignments need to be submitted through Moodle. Issues with technology use arise from time to time. If a technology issue does occur regarding an assignment submission, before the submission deadline, email me at [jnader@auk.edu.kw](mailto:jnader@auk.edu.kw) and attach a copy of the **completed** assignment you are trying to submit. This lets me know you completed the assignment on time and are just having problems with the online submission feature in Moodle. **Be sure to keep a backup of all work!**

### Course Schedule:

  Odd ID number (ending with 1, 3, 5, 7, 9)    
   Even ID number (ending with 0, 2, 4, 6, 8)

Week Number	Date	Material	Announcements
Week # 1	Feb 9 – 10	Introduction to the course, Syllabus and online tools needed to complete the course	
Week # 2	Feb 13 – 17	Introduction to the course, Syllabus and online tools needed to complete the course <i>Ch.1: Environmental problems, their causes and sustainability</i>	
Week # 3	Feb 20 – 24	<i>Ch.1: continued</i> <i>Ch.2: Science, matter, and energy</i>	
Week # 4	Feb 27 – March 3	<b>University Closed</b> <i>(National Liberation Days - Prophet's Ascension - Spring Break)</i>	
Week # 5	March 6 – 10	<i>Ch.3: Ecosystems: what are they and how do they work?</i>	<b>Quiz 1 – Chapter 1 – March 6</b>
Week # 6	March 12 – 17	<i>Saturday March 12 : Online Makeup class</i> <i>Ch.3: continued</i>	
Week # 7	March 20 – 24	<i>Ch.4-5: Biodiversity, species roles and interactions</i>	
Week # 8	March 27 – 31	<i>Ch.6: Human population &amp; Urbanization</i>	<b>Midterm Exam – Chaps 1 to 5 – March 31</b> <i>(Students with an Odd ID number)</i>
Week # 9	April 3 – 7	<i>Ch.7: Climate and Biodiversity</i>	<b>Midterm Exam – Chaps 1 to 5 – April 3</b> <i>(Students with an Even ID number)</i>
Week # 10	April 10 – 14	<i>Ch.8-9: Sustaining Biodiversity</i>	<i>Midterm grades available April 10 at 4pm</i>
Week # 11	April 17 – 21	<i>Ch.11: Water resources and water pollution</i>	
Week # 12	April 24 – 28	<i>Ch.11: continued</i>	<b>Quiz 2 – Chapters 7-9 – April 24</b>
Week # 13	May 1 – 5	<b>University closed (Eid El-Fitr)</b>	
Week # 14	May 8 – 12	<i>Ch.15: Air pollution, Climate change and Ozone depletion</i>	
Week # 15	May 15 – 19	<i>Ch.16: Solid and hazardous wastes</i>	
Week # 16	May 22 – 26	<i>Ch.16: continued</i> <i>May 24 – 26 : Presentations</i>	<b>Quiz 3 – Chapter 11 – May 22</b>
Week # 17	May 29 – June 2	<i>May 29 – 31 : Presentations</i> <i>June 2 : Review session – last day of classes</i>	
Week # 18	June 5 – 9	<b>Final Exam</b> <i>Final grades available June 13 at 4 pm</i>	

### Syllabus Changes:

There may be changes to the schedule and syllabus during the semester. When this happens, I will inform you in class and over email.

# Appendix – 1 – Presentation

*Presentations will take place on May 24<sup>th</sup> till May 31<sup>st</sup>, 2022*

*Submission deadline for files : Thursday May 26<sup>th</sup>, 2022*

## Topics available

You can choose ONE of the following topics:

- 1- Wastewater management : how is Kuwait dealing with it?
- 2- Fossil fuel consumption : are electric cars the best available solution?
- 3- Water in Kuwait : a description of its quantity and quality.
- 4- Air quality in Kuwait : what are the causes of air pollution?
- 5- Acid rain: a major threat to wildlife.
- 6- Sea urchin: how can it help reef restoration?
- 7- Conocarpus tree: is it harmless or harmful to Kuwait's ecosystem?
- 8- Clean energy : where does Kuwait stand?
- 9- Global warming : how does it affect the Amazon Forest?
- 10- Forest fires and global warming : is there a link between the two?
- 11- Landfills : a major cause to soil contamination
- 12- Overgrazing and mining : a major threat to grasslands
- 13- Plants : why are they important in ecosystems?
- 14- Fertilizers : a threat to aquatic ecosystems
- 15- E-waste : how to deal with it?
- 16- Ozone depletion : did the ozone layer heal?
- 17- Migratory birds : what is the impact of urban development on their survival?
- 18- Amphibians : why are frogs population declining?
- 19- Landscaping : how to reduce water consumption?
- 20- Solid waste : how to manage it sustainably?
- 21- Plastic pollution : a major threat to aquatic life

## Format

Groups of **3 students**

PowerPoint Presentation (15 slides maximum including the title slide, the agenda/outline and the references)

## General guidelines

- 1- Pick a topic and get familiar with it: identify the key points.
- 2- Research information: find reliable resources and organize the information.
- 3- Form your thesis: a statement that puts forward what you are trying to explain.
- 4- Create an outline:
  - a. think about what you are trying to communicate and what is the structure that will allow you to do that in a clear and organized way.
  - b. Have an introduction, an argumentation, and a conclusion.
- 5- References:
  - a. Have at least 3 different credible sources of information
  - b. If something is a common fact (if you can find the fact stated, without credit, in three or more credible sources), you don't need to mention where the idea comes from.
  - c. Present your references in MLA format (*check appendix 2 for more details*)
- 6- Do not be afraid of asking questions. The objective is to help you learn more about new topics.

## General grading criteria

The following criteria will be considered when grades are assigned:

- Topic and group presentation: presenting the group, the topic (title, introduction, reason behind the choice), the agenda/objectives
- Content and organization: valuable material, valid sources, quality of visuals (graphs/data/pictures), transition between sections, presentation organized and easy to follow
- Collaboration: the student is at ease with the material presented, the student answered questions/discussions
- Presentation: clear speech, engaging the audience, evidence of preparation and rehearsal