

SYLLABUS

Course Code	Course Num.	Course Name	Credit Hours	Lec.	Lab.	Tut.	Private study	Pre-requisites	Course Level	Teaching Language
BIO	252	Principle of environmental impact assessment	2	1	2	0	4	BIO 251	4	English

A. Course Description

This course has titles which will introduce environmental impact assessment. So, this course involves acts, laws, and regulations, assessment of impact on ecosystem dimension (terrestrial and aquatic ecosystem), assessment of impact on physical environmental dimension (soil and land use, water resource and air), assessment of quality of life dimension (health and socio-economic), public participation and public hearing in EIA process, mitigation and monitoring.

B. Course Outcomes

At the end of this course the student will be able to:

- Understand principles, process, and necessary tools and techniques for environmental impact assessment, mitigation and monitoring.
- Evaluate impacts from project's activities on natural resources, ecological system and community.

References:

Required Textbook

- Eccleston HC. Environmental Impact Statements. Canada: John Wiley & Sons, Inc.; (2000). ISBN13: 978-0471358688.
- Lee N, George C, editors. Environmental Assessment in Developing and Transitional Countries - Principles, Methods & Practice. (2000). ISBN-13: 978-0471985570.

Other references:

- http://www.kryeministri-ks.net/repository/docs/Final_EIA_Veterinary_Laboratory321.pdf.
- <http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/Appendix%20B.pdf>.

Course Website: Google Classroom Webpage: <http://www.imamm.org/>

C. Topics Outline

D1. Lectures Topics

- Introduction (Background of EIA, SEA, HIA).
- The steps and EIA processes.
- Acts, laws, and regulations
- Assessment of impact on ecosystem dimension (Terrestrial ecosystem).
- Assessment of impact on ecosystem dimension (Aquatic ecosystem).
- Assessment of impact on physical environmental dimension (soil and land use).
- Assessment of impact on physical environmental dimension (water resource and air).
- Assessment of Quality of life dimension (health and socio-economic).
- Assessment of Quality of life dimension (health and socioeconomic).
- Public participation and public hearing in EIA process.
- Mitigation and monitoring.
- Conclusion and students' presentation.
- Oral presentation.

D2. Laboratories Topics

• Lab 01	• Introduction Supply drawer check in General Lab rules and instructions
• Lab 02	• Microscope assignment and review, Microscope practice Wet mount, Brownian vs. Motility
• Lab 03,04	• Microbes in the environment Transfer of bacteria
• Lab 05	• Staining Methods: simple, acid-fast and Gram stain
• Lab 06	• Staining Methods: Special stains
• Lab 07	• Microbial metabolism
• Lab 08	• Microbial Growth
• Lab 09	• Control of Microbial Growth
• Lab 10	• Microbiology of Water
• Lab 11,12	• Microbiology of soil
• Lab 13,14	• Medical Microbiology Demonstration
• Lab 15	• General revision

D. Office Hours

Office hours give students the opportunity to ask in-depth questions and to explore points of confusion or interest that cannot be fully addressed in class.

E. Exams & Grading System

The semi-official dates of the exams for this course are:

- **Midterm 1:** 6th or 7th week.
- **Midterm 2:** 11th or 12th week.
- **Quizzes& Homework:** During the semester.
- **Lab exam:** 15th week.
- **Final Exam:** 16th week.

Your course grade will be based on your semester work as follows:

Midterm 1: 15 %	Midterm 2: 15 %	Lab exam: 20%	Final Exam: 40 %
Quizzes, Homework, Attendance & Participation: 10 %			

The grading distribution:

A+	A	B+	B	C+	C	D+	D	F
[95, 100]	[90, 95]	[85, 90]	[80, 85]	[75, 80]	[70, 75]	[65, 70]	[60, 65]	[0, 60]

F. Student Workload

#	Teaching/Learning activities	Contact hours	Frequency	Total contact hours	Self-study hours	Total self-study hours	Student learning time
5	Lecture	1	15	15	2	30	45
2	Tutorial	0	0	0	0	0	0
0	Lab\practical	2	15	30	1	15	45
5	Homework	0	4	0	2	8	8
4	Quiz	0.5	2	1	1	2	3
6	Midterm	1.5	2	3	5	10	13
7	Final Exam	2	1	2	12	12	14
Total				51		77	128

The independent self-study is approximately 5 hours per week.

G. Student Attendance/Absence

Only three situations will be considered as possible excused absences:

- Occurrence of a birth or death in the immediate family will be excused. (“Immediate family” is defined by the University as spouse, grandparents, parents, brother, or sister).
- Severe illness in which a student is under the care of a doctor and physically unable to attend class will be excused. Students are not excused for a doctor's appointment. Do not make appointments that conflict with rehearsals. Notes from the University Health Center will be accepted.

[Executive Rules for Study Regulations and Exams goo.gl/ykm7t3](http://goo.gl/ykm7t3)

