Arab Academy for Science, Technology & Maritime Transport
College of Engineering & Technology
Department of Basic and Applied Science

University/Academy: Arab Academy for Science, Technology & Maritime Transport
Faculty/Institute: College of Engineering & Technology
Program: B.Sc. Mechanical Engineering

Form No. (12)
Course Specification

1-Course Data

Course Code: **NE466**	Course Title: **Environmental Science and Technology**		Academic Year/Level: **5h** year / **10th** semester
Specialization:	No. of Instructional Units	Lecture	Practical
	3 Credits	**2 Hrs.**	**2 Hrs.**

2- Course Aim

To raise the level of environmental awareness of the students, and provide them with the necessary knowledge, capabilities and attitude that will enable them to deal more positively with environmental resources and their components, through learning about the diversity and complexity within the environment and the changes and transformations that occur through human activities

3- Intended Learning Outcome (ILO's)

a- Knowledge and Understanding	
b- Intellectual Skills	
c- Professional Skills	
d- General Skills	

4- Course Content

Lecture		
Wk	Hrs	
1	2	The biosphere the natural built environment, ecosystem components
2	2	Environmental resources, ecological systems and equilibrium.
3	2	The evolution of mankind's relation with the environment
4	2	The development of human awareness regarding environment problems
5	2	Population and the environment
6	2	Development and the environment
7	2	2 hrs revision and 2 hrs the seventh week exam
8	2	Environment and sustainable development
9	2	Poverty and the environment
10	2	Environment and consumer lifestyle
11	2	Relation between human health and environmental degradation
12	2	Discussion of reports as a 12th week exam
13	2	Environmental improvement
14	2	Economic and social returns / benefits of pollution abatement
15	2	Environmental management
16	2	Final Exam

5- Teaching and Learning Methods

- Lectures
- problems
- Individual and group course homework

6- Teaching and Learning Methods for Students with Special Needs

- Consulting with lecturer during office ours
- Consulting with Lecturer during office hours
- Private sessions for redelivering the lecture contents

7- Student Assessment

a- Procedures used:	• Written examinations to assess the Intended learning outcomes. • Continuous assessment (reports, discussions, o etc……) to assess the Intellectual skills.
b- Schedule:	Assessment 1: 7th Week Written Exam Assessment 2: 12th Week Written Exam Assessment 3: Continuous Assessments Assessment 4: 16th Week Final Written Exam
c- Weighing of Assessment:	7th Week Examination : 30 % 12th Week Examination: 20 % Final-term Examination: 40 % Oral Examination : 0 % Practical Examination : 0 % Semester Work : 10 % Total : 100%

8- List of References:

a- Course Notes	
b- Required Books (Textbooks)	Cheryl Simon & Ruth S. Dyries, *One earth, one future - Our changing Global Environment*, (translation in Arabic Sayed Ramadan), International Pub & Dis. House., 1992.
c- Recommended Books	▪ Mackenzie L. Davies and Susan J. Masten; Principles of environmental engineering and science; third edition; McGraw-Hill. 2014. ▪ Environmental Science and Engineering, 2nd ed, J. Glynn Henery & Gary W.Heinke, PrenticeHall, 1996.
d- Periodicals, Web Sites, ..., etc.	

Course coordinator: **Program Manager**