

Environment and Sustainable Development

- 1. Course number and name:** 020ENVGS1 Environment and Sustainable Development
- 2. Credits and contact hours:** 2 ECTS credits, 1x1.25 hours
- 3. Name(s) of instructor(s) or course coordinator(s):** Said CHEHAB
- 4. Instructional Materials:**
 - a. Environmental Science: Systems and Solutions by Michel Mc Kinney and Robert Schoch.
 - b. Le Petit Livre Vert : Nicolas Hulot
 - c. Little Green Data Book : World Bank
 - d. Instructor's Class Notes and Power Point Presentation
- 5. Specific course information**
 - a. **Catalog description:** Provide a comprehensive presentation on Environment and Sustainable Development to enable the student to assess and analyze the major environmental and development problems and challenges facing the humanity and to help him suggesting some practical and concrete issues.
 - b. **Prerequisites or co-requisites:** None
 - c. **Required:** Required for all Civil Engineering students
- 6. Educational objectives for the course**
 - a. **Specific outcomes of instruction:**
 - Introduce the student to the concepts of Protection of the Environment, Sustainable Development and resources management
 - Develop the background needed for analyzing problems and challenges facing the Environment globally and locally
 - Present and develop methodology to protect the environment
 - Familiarize students with Sustainability notions
 - Present and analyze solutions already adopted and developed in other countries
 - Explore practical issues for the Protection of the Environment in Lebanon and Enhance the Sustainability Development Awareness in the country.

b. PI addressed by the course:

PI	1.1	4.2
Covered	yes	yes
Assessed		

7. Brief list of topics to be covered:

1. Introduction (1 hour)
2. State of the Environment in Lebanon and towards the world (1 hour)
3. The Sustainability Development : Reality and Myth (1hours)
4. Climatic Change Issues (2 hours)
5. Ozone Depleting situation (1 hour)
6. Pollutions in Lebanon: Air Pollution, Water Pollution, Waste... (4hours)
7. Integrate Management System for Air/Water/Biodiversity and Earth (1 hour)
8. Waste management : Sorting, Reusing and Recycling .Dumping ,incineration controlled storage,...(2hour)
9. Efficiency Measures for water use, material use and energy consumption (2hours)