



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Planning of Natural Resources							
Course Code		MCE536		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		To give information about accurate evaluation of natural resources and to identify environmental problems and to take precautions for their solutions.							
Course Content		Introduction to the course and general terms, ecological equilibrium and natural resources, biodiversity conservation, atmospheric environment, global warming, air pollution, climate changes, water resources and sustainable water use, soil as a natural resource, land use, important environmental problems in the world and in our country, human impacts on natural resources: population increase, urbanization, protection of natural resources, important environmental agreements and Kyoto protocol.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)		Prof. Ayşe YÜKSEL OZAN							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Pierzynski, G.M., J.T., Sims, Vance, G.F., (2000) Soils And Environmental Quality, Crc Press, Washington.
2	Bennett, M.R., Doyle, P., (1999) Geology And The Human Environment, John Wiley & Sons, Newyork.
3	Ed.Wheeler, M.S.- Beatley T., (2003) The Sustainable Urban Development, Routledge Taylor & Francis Group, England.
4	Grove, A.T., Rackham, O., (2003) The Nature Of Mediterranean Europe An Ecological History, Yale University Press, New Haven And London.
5	Smithson, P., Addison, K.-Atkinson, K., (2002) Fundamentals Of The Physical Environment, Routledge Taylor & Francis Group, England.
6	Berkes, F. ve Kışlalıoğlu, M., Ekoloji ve Çevre Bilimleri, Remzi Kitabevi.
7	Yavuz, F. ve Keleş, R., 1983, Çevre Sorunları, Ankara Üniversitesi Siyasal Bilgiler Fakültesi Yayınları.
8	Tülüçü, K., 2002, Su Kaynakları Sistemlerinin Planlanması.
9	Bayazıt, M., 1995. Su Kaynakları Sistemleri, İ.T.Ü.
10	Hall, W. A. Dracup, J. A., 1970. Water Resources Systems Engineering, Mc Graw-Hill.
11	Hillier, F.S., and Lieberman, G. J. , 2001. Introduction to Operation Research, McGraw- Hill Book Co.
12	Loucks, D. P., Beek, E.V., 2005. Water Resources Systems Planning and Management, UNESCO.
13	Mays, L. W., Tung, Y. K., 1992. Hydrosystems Engineering and Management, Mc Graw-Hill.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the course and general terms
2	Theoretical	Ecological equilibrium and natural resources
3	Theoretical	Biodiversity conservation
4	Theoretical	Atmospheric environment: Global warming, air pollution, climate changes
5	Theoretical	Water resources and sustainable water use
6	Theoretical	Water resources and sustainable water use
7	Theoretical	Groundwater
8	Intermediate Exam	Midterm Exam
9	Theoretical	Soil as a natural resource and Land use
10	Theoretical	Planning and distribution of municipal and drinking water and estimation of drinking water and management
11	Theoretical	Drought
12	Theoretical	Important environmental problems in the world and in our country
13	Theoretical	Human impacts on natural resources: Population increase and urbanization



14	Theoretical	Protection of natural resources
15	Theoretical	Important environmental agreements and Kyoto protocol
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	3	56
Assignment	3	0	16	48
Individual Work	13	0	4	52
Midterm Examination	1	20	2	22
Final Examination	1	20	2	22
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Importance of natural resources
2	Recognition of natural resources
3	Sustainable use of natural resources
4	To be able to link between environment and natural resources
5	Protection of natural resources

Programme Outcomes (Civil Engineering Master)

1	To be able to develop expertise knowledge in a Civil engineering area founded on their graduate competence.
2	To be able to use the theoretical and practical expertise knowledge gained in their specialty area.
3	To be able to use the information, problem solving and / or practical skills from the field, in interdisciplinary studies.
4	To be able to create new knowledge by integrating their knowledge area with the knowledge coming from different disciplines; and solve problems that need expertise by using scientific research methods
5	To be able to solve the problems related to his/her area by using appropriate research methods
6	To be able to devise a problem in their specialty area, develop a solution methodology, solve the problem, and interpret the results and take action if necessary
7	To be able to criticize the knowledge in their specialty area, guide the learning process, and independently direct high level studies
8	To be able to systematically communicate the recent developments in their specialty area and their own studies to groups both inside and outside their specialty area, orally, in writing and visually
9	To be able to use computer software at a level required by their specialty area with drawing upon information and communication technology at a high level
10	To be able to introduce scientific, technological, social and cultural advancements in the field of civil engineering and to contribute to the process of being an information of the society and to sustain it.
11	To be conscious of professional and ethical responsibility and contribute to the establishment of this consciousness.
12	To be able to protect social, scientific, and ethical values during collection, interpretation, and dissemination stages of the data associated with their specialty area; instruct and supervise these values
13	To be able to use at least one foreign language in a level to follow current developments related to the field.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	5	4	5	4	5
P2	4	5	4	5	4
P3	5	4	5	4	5
P4	4	5	4	5	4
P5	5	4	5	4	5
P6	4	5	4	5	4
P7	5	4	5	4	5
P8	4	5	4	5	4
P9	5	4	5	4	5
P10	4	5	4	5	4
P11	5	4	5	4	5



P12	4	5	5	5	4
P13	5	4	5	4	5

