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| DEREE COLLEGE SYLLABUS FOR: | | | | | |
| ES 1005 LE CONTEMPORARY ENVIRONMENTAL ISSUES | 3/0/3 | | | | |
| (Fall 2015) | | | | | |
| PREREQUISITES: | No prerequisites | | | | |
| CATALOG DESCRIPTION: | An introduction to contemporary environmental issues; a study of the relationship between humans and the environment, based on an analysis of case studies and with emphasis on sustainable solutions. Selected environmental topics of relevance to modern societies are discussed. | | | | |
| RATIONALE: | Contemporary Environmental Issues is a science course that is designed for students with little or no background in natural sciences and aims at giving them an understanding of the relationship between humans and the environment and of major environmental challenges today. Students receive an overview of the global environmental picture, understand the complex nature of environmental problems, and learn what they can do to contribute to a more sustainable future. The course examines different environmental topics using a case study approach. It helps create well-informed citizens in today's rapidly changing world. | | | | |
| LEARNING OUTCOMES: | As a result of taking this course, the student should be able to: <ol style="list-style-type: none"> 1. Demonstrate knowledge and understanding of how natural systems work and how humans interact with them. 2. Describe the global environmental picture, outlining major environmental problems and their causes, natural or anthropogenic. 3. Demonstrate understanding of the scientific nature of environmental problems such as climate change, air and water pollution, energy issues and environmental hazards and of the importance of science in studying and addressing these problems. 4. Explain the concept of sustainability and its different dimensions (ecological, social, economic), as well as the importance of a multidisciplinary approach for environmental problem solving. 5. Evaluate approaches to address different environmental problems and discuss steps and measures that governments and individuals can take to contribute to a more sustainable future. | | | | |
| METHOD OF TEACHING AND LEARNING: | In congruence with the learning and teaching strategy of the college, the following tools are used: <ul style="list-style-type: none"> • Class lectures, interactive learning (class discussions, group work), video presentations, and practical problems solved in class. • Exercises and primary source documents are assigned as homework and are discussed and reviewed in class • Office hours: students are encouraged to make full use of the office hours of their instructor, where they can ask questions, see their exam paper, and/or go over lecture/lab material. • Use of a blackboard site, where instructors post lecture notes, assignment instructions, timely announcements, web links as well as additional resources. | | | | |
| ASSESSMENT: | <p>Summative:</p> <table border="1"> <tr> <td>Midterm examination (2 hours): Multiple choice/short answers/essay questions (combination)</td> <td>50</td> </tr> <tr> <td>Final examination (2 hours):</td> <td>50</td> </tr> </table> | Midterm examination (2 hours): Multiple choice/short answers/essay questions (combination) | 50 | Final examination (2 hours): | 50 |
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| Final examination (2 hours): | 50 | | | | |

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| | <table border="1"> <tr> <td>Multiple choice/short answers/essay questions (combination)</td> <td></td> </tr> </table> <p>Formative:</p> <table border="1"> <tr> <td>Essay questions (as homework assignments)</td> <td>0</td> </tr> <tr> <td>In-class or online quizzes</td> <td>0</td> </tr> </table> <p>The formative tests aim to prepare students for the examinations. The midterm examination tests Learning Outcomes 1,2,3,4. The final examination tests Learning Outcomes 3,4,5.</p> | Multiple choice/short answers/essay questions (combination) | | Essay questions (as homework assignments) | 0 | In-class or online quizzes | 0 |
| Multiple choice/short answers/essay questions (combination) | | | | | | | |
| Essay questions (as homework assignments) | 0 | | | | | | |
| In-class or online quizzes | 0 | | | | | | |
| INDICATIVE READING: | <p>Required Reading:</p> <ul style="list-style-type: none"> Cunningham, W.P. and Cunningham, M.A. Environmental Science: Inquiry and Applications, 7th Edition, 2013, Mc Graw-Hill. ISBN 978-0-07-353251-6 <p>Recommended Readings:</p> <ul style="list-style-type: none"> Berg, I.R., Hager, M.C. and Hassenzahl, D.M. Visualizing Environmental Science, 4th edition, 2011, Wiley, ISBN 9781118169834 Miller, G.T. and Spoolman, S.E. Environmental Science, 15th edition, 2016, Cengage, ISBN 13: 978-1-305-09044-6 | | | | | | |
| INDICATIVE MATERIAL: (e.g. audiovisual, digital material, etc.) | <p>REQUIRED MATERIAL: N/A</p> <p>RECOMMENDED MATERIAL: N/A</p> | | | | | | |
| COMMUNICATION REQUIREMENTS: | Verbal skills using academic/professional English | | | | | | |
| SOFTWARE REQUIREMENTS: | Word, Powerpoint, Excel | | | | | | |
| WWW RESOURCES: | <ul style="list-style-type: none"> www.sciam.com: Scientific American www.unep.org: United Nations Environment Program www.iucn.org: International Union for the Conservation of Nature www.theecologist.org: Ecologist www.iisd.org: International Institute for Sustainable Development http://www.epa.gov: U.S. Environmental Protection Agency http://www.eea.europa.eu: European Environment Agency | | | | | | |
| INDICATIVE CONTENT: | <ol style="list-style-type: none"> Introduction: Environmental Problems, Science and Sustainability Understanding our Environment <ul style="list-style-type: none"> Environmental Systems: Matter, Energy and Life Biodiversity Case Studies on Contemporary Environmental Issues. Examples: <ul style="list-style-type: none"> Tropical Forests in Brazil: Current Environmental Issues Atmospheric Pollution in Athens River Basin Management in Greece Circular Economy: A Main Goal in the EU Renewable Energy in China Vauban: A Car-Free Suburb in Germany | | | | | | |