

---

**A Unique Interdisciplinary Course for Everybody**  
**Offered in Spring 2002 at Northern Illinois University**

---

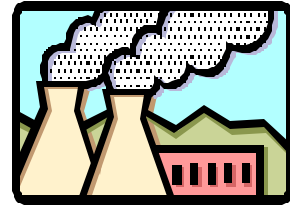


**MEE 200 Energy and the Environment**

*This is a course essential for every person and the whole society,  
and it is an introductory course for everybody based on  
high school algebra, physics and chemistry only.*

**'Energy and Environment for Everybody'**

More Info at [www.kostic.niu.edu/energy](http://www.kostic.niu.edu/energy)



---

**Course Vision and Objectives:**

---

As we, especially in a developed and sophisticated society, are entering the twenty-first century, it is essential for every person and the society to expend 'awareness of *Energy*,' which is the cause for all progress ("*living*"), and its 'impact on the *Environment*' (*all existing matter and organisms* around and including "*us*"). The students should fully *understand*, appreciate and be intrigued with universality of energy and matter, and philosophy of the fundamental *Laws of Nature* and their impact on the *Environment* and the *Society* we live in.

As consumers of energy or decision-making citizens in matters related to energy (virtually all matters!) and its effects on the environment and society, our graduates, the-soon-to-be engineers and economists, journalists and politicians, lawyers, educators, etc., should have an appropriate understanding and knowledge of the issues related to energy and the environment. Energy consumption has been growing exponentially, virtually reflecting the society's state of development, while at the same time impacting our environment in many important and sensitive ways. In addition to classical technical, socioeconomic, and political perspectives, our non-engineering (and engineering) students have to understand the philosophy and physics behind the fundamental concepts in order to be aware of reality and relativity associated with these important concepts. These vital issues are essential for every person, and particularly for an educated person.

This course is designed and offered as a general education course, rather than an engineering or physics course, because the subject of energy is examined not only from scientific and technical, but also socioeconomic and political perspectives. As such, there is more emphasis on the various aspects of the impact on environment and society, and less on the technical and math skills or problem solving.

---

**Course Instructor and Presentation:**

---

Course instructor is Dr. M. Kostic, an Associate Professor in the Department of Mechanical Engineering at Northern Illinois University < [www.kostic.niu.edu](http://www.kostic.niu.edu) >. He received his Ph.D. from the University of Illinois, and then worked in industry for some time. Professor Kostic's teaching and research interests are Thermodynamics, Fluid Mechanics, Heat Transfer and related Fluid/Thermal/Energy sciences; with emphases on new technologies, experimental methods, creativity, design, and computer applications.

The course presentation will use advantages of new and information technologies, including interactive multimedia and Internet resources, to effectively present technical concepts to interdisciplinary students in an appealing and easy-to-understand form – "*an eye and mind opener.*" The course will consist of lectures, discussions of current events, and use of the World Wide Web to access current information and other invaluable recourses. The course presentation with relevant examples will illustrate underlying philosophy, developments and applications, as well as the hype, challenges and opportunities related to the "*Energy and Environment.*"

We take our present level of energy use for granted and have become accustomed to lifestyles of abundant and inexpensive energy sources. Yet, a remarkable view of our *Planet Earth* from the space has created a vivid image that the world we inhabit is beautiful, but fragile and finite in size. This implicates important limits on our choices for the continued growth of energy use and its impact on the environment as well as our endeavors and lifestyle we decide to pursue as an individual or the whole society. The choices we support or make to meet our energy needs in the future will have an important impact on our and our children's lives for the centuries to come.