



Politechnika Krakowska
im. Tadeusza Kościuszki

FACULTY: FACULTY OF ENVIRONMENTAL ENGINEERING

COURSE TITLE: INTRODUCTION TO ENERGY ANALYSIS

Institute/Division: Institute of Water Supply and Environmental Protection, Chair of Environmental Technologies

Number of contact hours: 30 Lectures, design exercises, laboratory

Course duration: 1 semester (SPRING)

ECTS credits: 2

Course description: *The main goals of the course are following: to teach students the principles and practices of quantitative methods for the evaluation of environmental impacts and analysis of carrying capacity of economic development, and interactions of ecological and economical systems. As a result of teaching, students will be able to build the system analysis models, simulate them and analyze the results. The lecture topics include: energy and its hierarchy, environmental production and economic use, energy memory, energy quality, energy transformation, evaluation of environmental resources, energy of states and nations, environmental accounting, principles of system analysis and visualization of a system, evaluating international exchange evaluation of alternatives for development.*

Literature: Odum, H.T.. 1996. " Environmental Accounting". John Wiley & Sons;
Odum, H.T., and E.C. Odum. 2000 "Modeling for All Scales". Academic Press. San Diego
Also copies of the articles will be provided before some lectures meetings.

Assessment method: Final test (70%), exercises (20%), attendance (10%)

Prerequisites: Chemistry, biology and ecology

Primary target group: 2nd year students in Environmental Engineering programme, BSc(Undergraduate)

Lecturer: Elżbieta Płaza, Ph.D.

Contact person: Elżbieta Płaza, Ph.D., phone #: +48 12 628 2585; e-mail: eplaza@vistula.wis.pk.edu.pl

Deadline for application: 1st February 2016