

Course title **ECTS** code Ekonomia w ochronie środowiska / Economics in 7.2.0600 environmental protection Name of unit administrating study Faculty of Chemistry Studies Field of study Form Type Full-time studies **Environmental Protection** Bachelor Teaching staff Barbara Pawłowska, Associate Professor **ECTS** credits Forms of classes, the realization and number of hours in-class learning hours - 30 A. Forms of classes, in accordance with the UG Rector's consultation hours - 2 regulations student's own work - 18 hours lecture, student classes Total: 50 hours = 2 ECTS credits The realization of activities in-class learning C. Number of hours lecture - 15 hours, classes - 15 hours. The academic cycle Third year, summer semester Type of course Language of instruction Polish obligatory **Teaching methods** Form and method of assessment and basic criteria for evaluation or examination requirements Lectures including multimodal presentations, A. Final evaluation, in accordance with the UG study regulations Individual projects, case studies, collaborating, grade assessment group activities, didactic games, **B.** Assessment methods Sum of partial grades obtained by the student during the semester on thematic presentations and students' activities, discussion during The written test that evaluates the knowledge from the lectures. The basic criteria for evaluation Lecture: the written test - 20 points can be obtained max. Partial grades obtained by the student during the semester on thematic presentations and students' activities, discussion during classes. Final marks assignment: less than 9,99 points - unsatisfactory (2); 10-11,99 points – satisfactory (3); 12-13,99 points – satisfactory plus (3+); 14-15,99 points – good (4); 16-17,99 points – good plus (4+); 18-20 points - very good (5). Required courses and introductory requirements

Learning objectives:

A. Formal requirements - none

B. Prerequisites - none

This course is designed to serve as a foundation course for students in Economic aspects of environmental protection. The course will introduce the core concepts, principles and practices of sustainable development (SD) in social and economic life. It examines the environmental, economic, and social dimensions of SD by focusing on changing patterns of consumption, production, and distribution of resources. Student learns the types of economic ties, including the rules of the market and the market mechanism, both on the national and international in the environmental context.



Course contents:

Lecture:

- 1. Ecological footprint and Living Planet Index (LPI) theoretical introduction (what is an ecological footprint and LPI, how they are measured and how ecological footprint can be improved) and the discussion on the indicators for Europe and rest of the world.
- 2. Identification of challenges of the global world & impact of human activities on the environment: Social pressure and demographic trends, urbanization processes; Economic growth, technology and globalization; Environmental pressure, food production; External effects of human activities.
- 3. From Stockholm to Paris a short history of environmental events and statements (UN Conference on Human Environment; Our Common Future, Rio Declaration, Rio+10 and Rio+20; Kyoto Protocol; EU SD Strategy; Europa 2020; Roadmap 2050; COP 21: UN climate change conference / Sustainable Innovation Forum).
- 4. Macroeconomic policies and the environment
- 5. Government and Civil society;

Classes:

- 1. Policies, instruments and the environment; Policy implementation.
- 2. Market failure: public goods and externalities
- 3. The theory of environmental externalities;
- 4. Internalizing environmental costs;
 - a. Market failures;
 - b. Shadow prices;
 - c. Public goods;
 - d. Property rights and the Coase theorem.
- 5. Firms and markets corporate perspectives (identifying and prioritizing problems; defining priorities for actions: diagnosing causes and finding solutions; valuating the costs and benefits of Temat IV:
- 6. Scientific experiment: correction of external effects: Coase's theorem.
- 7. Actions and tools to improve the efficiency of natural capital management using METAPLAN technic.

Bibliography of literature:

A. Literature required for final assessment:

- 1) B. Fiedor, S. Czaja, A. Grabarczyk, Z. Jakubczyk: Podstawy ekonomii środowiska i zasobów naturalnych, Wydawnictwo C.H. Beck, Warszawa 2002;
- 2) Gospodarka a środowisko i ekologia, pod red. K. Małachowskiego, Wydawnictwa Fachowe CeDeWu, Warszawa 2007;

B. Supplementary literature

- 1) S. Czaja, A. Becla: Ekologiczne podstawy gospodarowania, wydawnictwo Akademii Ekonomicznej we Wrocławiu, Wrocław 2007;
- 2) L. R. Brown: Gospodarka ekologiczna na miarę Ziemi, Książka i Wiedza, Warszawa 2003 http://www.earth-conservation.org/eko-ekonomia/Eko-ekonomia%5Bwww.ziemia.org%5D.pdf;
- 3) J. Berdo: Zrównoważony rozwój. w stronę życia w harmonii z przyrodą, Earth Conservation, Sopot 2006, http://www.earth-conservation.org/rozwoj pdf/Zrownowazony-rozwoj-calosc.pdf;
- 4) Web pages of governmental organizations, non-governmental organizations, civic movement, reports and annual reports of Polish and international statistics; e.g. GUS https://sdg.stat.gov.pl/index.jsf, European portal:
- http://ec.europa.eu/environment/pubs/studies.htm, European Environment Agency: https:// www. eea.europa.eu/;

Contact:

barbara.pawlowska@ug.edu.pl