



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Economics of sustainable development [S1TOZ1>EZR]

Course

Field of study

Circular System Technologies

Year/Semester

1/1

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

Number of hours

Lecture

30

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

0

Number of credit points

3,00

Coordinators

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Lecturers

Prerequisites

The student has basic theoretical knowledge of microeconomics, knows the basic laws and principles of economics as well as the basics of resource management and accounting. He/she knows and understands the assumptions of sustainable development and the need for rational management of limited natural resources. Demonstrates readiness to develop his knowledge and teamwork skills. Is aware of socio-economic processes and phenomena.

Course objective

The aim of the course is to gain knowledge and acquire skills and competences in the field of: basic assumptions of the economics of sustainable development, including interdisciplinary knowledge; the goals of a sustainable development of the economy; strategic areas of sustainable development; human values in the concept of contemporary economic development; activities of organizations and world economies for sustainable development.

Course-related learning outcomes

Knowledge:

1. knows the key theses of the economics of sustainable development and the principles of the ethics of sustainable development [k_w05].
2. knows the economic, legal and administrative aspects of the functioning of the circular economy [k_w05].
3. has knowledge of the negative impact of manufacturing and processing technologies on the natural environment [k_w08].
4. has knowledge of trends and modern technologies supporting sustainable development [k_w14].
5. knows the general principles for creating and developing various forms of individual entrepreneurship [k_w25].

Skills:

1. can use the acquired theoretical knowledge and data from secondary sources in polish and a foreign language, integrate them, interpret them, make a critical assessment and draw conclusions [k_u01, k_u04].
2. correctly uses the terminology of the economics of sustainable development in the discussion, also in a foreign language [k_u05].
3. is able to work both individually and in a team, presenting and evaluating opinions on the state and directions of sustainable economic development [k_u07, k_u08].
4. on the basis of the acquired knowledge, can develop an independent or team project/report on the work performed and make its multimedia presentation [k_u15].

Social competences:

1. supports the idea of a harmonious, global civilization and economic development, promoting the principles of a circular economy, sustainable development and rational management of natural environment resources at a local and global level [k_k09].
2. is aware of the importance of behaving in an ethical and professional manner, respecting the opinions of team members and the environment [k_k01, k_k08].
3. demonstrates independence and invention in individual and team work, performing various roles and taking responsibility for the assigned tasks [k_k01, k_k02].
4. understands the importance of improving professional and personal competences according to the changing social conditions and the progress of science [k_k05].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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Knowledge acquired during the lecture is verified by one 60-minute colloquium carried out at the last lecture. It consists of 10-15 questions (test and open) with various points depending on their level of difficulty. Passing from: 60% of points. Issues and materials, on the basis of which questions are prepared for the colloquium, will be sent to students by e-mail using the university's e-mail system and uploaded on Moodle course. The final grade can be raised for the student's active participation in the problem and conversation lecture.

Programme content

The program includes: the basic assumptions of sustainable development economics, including the goals and strategic areas of sustainable development, as well as tools for measuring and reporting progress in the implementation process.

Course topics

1. Sustainable development: conceptualization, assumptions, goals, and problem areas.
2. Subject of interest in the economics of sustainable development. Autonomy or interdisciplinarity of the new development paradigm?
3. Differences between the traditional approach to economic growth and development with regard to the classical economics and the economics of sustainable development.
4. Criticism of the concept of homo oeconomicus in favor of homo cooperativus.
5. Goals of the economics of sustainable development: economy, society, ecology.
6. Key theses of the economics of sustainable development and the principles of ethics of sustainable

development.

7. Measures of sustainable development.

8. Characteristics of selected strategic areas of sustainable development on the example of sustainable economic and energy policy, mobility policy and product development.

9. Limitation of excessive consumerism as one of the conditions for sustainable development.

10. Limits of economic growth. Is permanent growth real?

11. The European Sustainable Development Strategy - assumptions, goals, implementation process.

12. The role of local government units in the implementation of the sustainable development strategy.

Teaching methods

Lecture: multimedia presentation illustrated with examples (case studies); problem lecture (discussion on solving a given problem), conversation lecture (discussion moderated by the lecturer).

Bibliography

Basic

1. EU Sustainable Development Strategy (e.g. The 2030 Agenda for Sustainable Development)

https://ec.europa.eu/environment/sustainable-development/strategy/review/index_en.htm

2. Rogall H., *Ekonomia zrównoważonego rozwoju*, Zys i Ska, Warszawa 2010.

3. Teoretyczne aspekty ekonomii zrównoważonego rozwoju, Poskrobko B. (red.), Wyższa Szkoła Ekonomiczna, Białystok 2011.

4. Poskrobko B., *Od ekorozwoju do ekonomii zrównoważonego rozwoju*, *Ekonomia i Środowisko*, 2011, 2 (40), s. 240-267.

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7. *Polska 2025 - długookresowa strategia trwałego i zrównoważonego rozwoju* (omówienie), *Przegląd Rządowy*, 2000, nr 8, s. 109-115.

8. Badzińska E., *ECONOMICS OF SUSTAINABLE DEVELOPMENT*, materiały dydaktyczne w ramach projektu "Inżynier przyszłości. Wzmocnienie potencjału dydaktycznego Politechniki Poznańskiej", 2014.

9. Zalega T., *Zrównoważony rozwój a zrównoważona konsumpcja*, *Konsumpcja i Rozwój*, 2015, 4(13).

10. Zikic S., *A modern concept of sustainable development*, *Progress in Economic Sciences* No. 5 (2018), pp. 143-151.

11. *The Economics of the Sustainable Development Goals* (*Environmental Scientist*), 03 Jan 2018, <https://unepinquiry.org/blogs/the-economics-of-the-sustainable-development-goals/>

12. *OECD INSIGHTS - SUSTAINABLE DEVELOPMENT: LINKING ECONOMY, SOCIETY, ENVIRONMENT*, ISBN

978-92-64-055742, OECD 2008.

Additional

1. Poskrobko B., *Metodologiczne aspekty ekonomii zrównoważonego rozwoju*, *Ekonomia i Środowisko*, 2012, 3(43).

2. *Gospodarowanie zasobami środowiska. Podstawy ekonomiki ochrony środowiska*, Wąsowicz M. (red.), Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2011.

3. Midor K., *Piętno ekologiczne jako miara zrównoważonego oddziaływania człowieka na środowisko*, *Ekonomika i Organizacja Przedsiębiorstwa*, 2010, nr 4.

4. Zalega T., *Rozwój zrównoważony a ekonomia zrównoważonego rozwoju – zarys problematyki*, *Studia i Materiały*, 2016, 1(20), s. 101-122.

5. Sachs J., *The end of poverty*, Penguin Books USA, New York 2005.

6. *Europa 2020. Strategia na rzecz inteligentnego i zrównoważonego rozwoju sprzyjającego włączeniu społecznemu* (2010). Komunikat Komisji Europejskiej, Bruksela, KOM (2010).

7. Kiełczewski D., *Konsumpcja a perspektywy trwałego i zrównoważonego rozwoju*, Wyd. UwB, Białystok 2004.

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Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	38	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	37	1,50