



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Economics of Sustainable Development

### Course

Field of study

Engineering Management

Area of study (specialization)

Level of study

First-cycle studies

Form of study

part-time

Year/Semester

4/7

Profile of study

general academic

Course offered in

English

Requirements

elective

### Number of hours

Lecture

10

Laboratory classes

Tutorials

10

Projects/seminars

Other (e.g. online)

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

Ewa Badzińska, Ph.D.

Responsible for the course/lecturer:

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Faculty of Engineering Management

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### 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. Is able to apply cost accounting in business operations and characterize the assumptions of environmental protection and 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. Has knowledge of the development stages of the economics of sustainable development.
2. Knows the difference between economic growth in the light of classical and modern economics.
3. Knows the key theses of the economics of sustainable development and the principles of sustainable development ethics.
4. Has knowledge of trends creating the economics of sustainable development.

#### Skills

1. Is able to define and compare approaches regarding the concept of the economics of sustainable development.
2. Is able to highlight the key theses of the economics of sustainable development and their major controversy.
3. Is able to use basic theoretical knowledge and obtain data to analyze specific processes in the field of sustainable development.
4. Is able to indicate the main challenges in the context of sustainable socio-economic development in Poland.

#### Social competences

1. Is able to recognize cause-and-effect relationships in achieving the set goals in the field of sustainable development.
2. Demonstrates readiness to take responsibility for actions to protect future generations and oneself.
3. Is aware of the importance of behaving in an ethical and professional manner while respecting the environment.
4. Adheres to the rules necessary for building a sustainable economy.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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.

Knowledge, skills and social competences acquired as part of tutorials are verified based on the presentation of the completed project/assignment, the developed case study and student activity



during classes (participation in the discussion, independent problem solving). Criteria for evaluation of the project / assignment will be provided to students in the first class.

### Programme content

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. Goals of the economics of sustainable development: economy, society, ecology.
5. Criticism of the concept of homo oeconomicus in favor of homo cooperativus.
6. Key theses of the economics of sustainable development and the principles of ethics of sustainable development.
7. Characteristics of selected strategic areas of sustainable development on the example of sustainable economic and energy policy, mobility policy and product development.
8. Limitation of excessive consumerism as one of the conditions for sustainable development.
9. Limits of economic growth. Is permanent growth real?

### Teaching methods

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

Tutorials: case study method, discussion methods: brainstorming, metaplan (conclusions from discussion in teams presented on the forum in the form of a poster, multimedia presentation); Exercise and practical methods: solving cognitive tasks, teamwork.

### Bibliography

Basic

1. Rogall H., *Ekonomia zrównoważonego rozwoju*, Zysk i Ska, Warszawa 2010.
2. *Teoretyczne aspekty ekonomii zrównoważonego rozwoju*, B. Poskrobko (red.), Wyższa Szkoła Ekonomiczna, Białystok 2011.
3. Poskrobko B., *Od ekorozwoju do ekonomii zrównoważonego rozwoju*, *Ekonomia i Środowisko*, 2011, nr 2 (40), s. 240-267.



4. Czaja S., Paradygmat ekonomii głównego nurtu i ekonomii zrównoważonego rozwoju, w: B. Poskrobko (red.), *Ekonomia zrównoważonego rozwoju w świetle kanonów nauki*, Wyższa Szkoła Ekonomiczna, Białystok 2011, s. 28-50.
5. Midor, K., *Ekonomia zrównoważonego rozwoju alternatywą dla współczesnej gospodarki światowej, Systemy Wspomagania w Inżynierii Produkcji*, 2012, 2 (2), s. 56-68.
6. *Polska 2025 - długookresowa strategia trwałego i zrównoważonego rozwoju (omówienie)*, Przegląd Rządowy, 2000, nr 8, s. 109-115.
7. Badzińska E., *ECONOMICS OF SUSTAINABLE DEVELOPMENT*, materiały dydaktyczne w ramach projektu "Inżynier przyszłości. Wzmocnienie potencjału dydaktycznego Politechniki Poznańskiej", 2014.
8. Zalega T., *Zrównoważony rozwój a zrównoważona konsumpcja*, *Konsumpcja i Rozwój*, 2015, 4(13).
9. Zikic S., *A modern concept of sustainable development*, *Progress in Economic Sciences* No. 5 (2018), pp. 143-151.
10. *The Economics of the Sustainable Development Goals (Environmental Scientist)*, 03 Jan 2018, <https://unepinquiry.org/blogs/the-economics-of-the-sustainable-development-goals/>
11. *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 ekonomii ochrony środowiska*, M. Wąsowicz (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.
8. Hertwich, E.G., *Life Cycle Approaches to Sustainable Consumption: A Critical Review*. *Environmental Science & Technology*, 2005, 39(13).



### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	20	1,0
Student's own work (literature studies, preparation for classes/tutorials, describing case studies, completing tasks and presentation, preparation for colloquium) <sup>1</sup>	55	2,0

<sup>1</sup> delete or add other activities as appropriate