



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Strategy of risk management under conditions of circular economy [S1TOZ1>SZRwWGOZ]

Course

Field of study

Circular System Technologies

Year/Semester

1/2

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 (e.g. online)

0

Tutorials

0

Projects/seminars

0

Number of credit points

3,00

Coordinators

dr Tomasz Brzęczek

tomasz.brzeczek@put.poznan.pl

dr hab. Marek Szczepański prof. PP

marek.szczepanski@put.poznan.pl

Lecturers

Prerequisites

None.

Course objective

Teaching students about theory of risk, especially the strategy of business and market risk management in an enterprise of circular economy.

Course-related learning outcomes

Knowledge:

student:

has knowledge about production costs classification and about public costs and environmental losses owing to industrial activity and development [k_w08],

has basic knowledge about product life cycle and product and product portfolio management, especially under participation in circular economy [k_w12],

knows theory of decision making under uncertainty or risk [k_w25],
knows sources and principles of circular economy and its regulations [k_w26].

Skills:

understands terms and techniques of analysis and management of decision risk concerning: business, production operations, research and development, investments and insurance, therefore he can cooperate with people specializing in other fields but working in circular economy [k_u09], can classify production costs and analyse their total and marginal amounts, also estimates public and environmental costs [k_u23].

Social competences:

he can make rational decisions in the field of business and operations, backing them with risk analysis and or insurance [k_k03],
is able to do business and ensure its risk [k_k06].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

1. Written test including theory and questions takes place at last lecture.
2. In mid-time of semester takes place revision of topics.
3. The most interested students can prepare more detailed case study analysis under supervision.

Programme content

1. Main types of risks important for the circular economy [K_W05].
2. Operational risk - areas of occurrence, classification [K_W05].
3. Methods and instruments for operational risk management, its measurement and reduction [K_W05].
4. Main types of financial risk (credit risk, currency risk, interest rate risk, liquidity risk, risk related to the improper use of derivatives) [K_W05].
5. Methods and instruments for managing financial risk in an enterprise [K_W05].
6. Decision making under uncertainty. Country's industrial strategy impact on the level of uncertainty in circular economy [K_W25].
7. Decision making under economic and business risk. Methods of risk estimation. The comparison of classical business risk with the risk of environmental friendly investment [K_K03; K-K06].
8. Expected Value of Perfect Information and risk pricing. Application of such techniques in investment decisions, consulting ordering, project decisions and insurance decisions [K_U22].
9. Product life cycle and product strategies of enterprises and their relevance to governmental regulations of circular economy. Analysis of some solutions like KGO - the cost of durable consumer goods utilisation, recycling and market impact of electricity subsidizing [K_W12].
10. Subsidizing or quasi-market tools for financing of green technologies with economic ineffectiveness. Let's discuss institutional supervising, financing and foundations [K-U09].
11. Estimating and classifying costs of production, and public costs of production. How to estimate costs of pollution. Let's use random variable calculus for random events in circular economy [K_W08; K_U23].
12. Legal regulations of circular economy and regulations of recultivation of natural resources [K_W26].

Teaching methods

1. Lecture.
2. Case study.

Bibliography

Basic

1. Brzęczek T., Borowiec A., Mikroekonomia, Wyd. PP, 2011.
2. Skawińska E. (red.) Wybrane problemy ekonomii. Ćwiczenia i zadania, Wydawnictwo PP, Poznań 2006.

Additional

1. Mankiw N.G., Taylor M.P., Mikroekonomia, PWE, 2009, czytelnia główna PP (A163609).

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