

| Year          | 2021/2022   |       |
|---------------|---|-------|
| Course title  | Creative Problem-Solving Process and Design Thinking (CEMS) |       |
| Course number | 236421 - 0709 5 ECTS p                                      | oints |
| Lecturer      | Kasprzak Rafał , PhD and team: Ziółkowska Marta Joanna, PhD |       |

#### A. Course objective

CPS is a form of deliberate creativity: a structured process for solving problems or finding opportunities, used when you want to go beyond conventional thinking and arrive at creative (novel and useful) solutions. In the 1950s, advertising executive Alex Osborn studied creative people to see how they came up with ideas and creative solutions. He called the process he observed "creative problem solving," and documented it in his seminal book, Applied Imagination. Osborn's work soon caught the attention of a college professor who wanted to study and extend the work. Sidney Parnes, Ruth Noller, and their colleagues provided the academic scrutiny that confirmed that CPS works, that it can be taught, and that people can learn to improve the way they think and solve problems. There are many processes that use the term "creative problem solving" that are not based on the work of Osborn and Parnes. Generally, when the name is written with capital letters ("Creative Problem Solving") or abbreviated "CPS," the work is based on the Osborn-Parnes model. Design Thinking methodology was firstly introduced by B. Archer in 1965, however the full methodology was established by D. Kelly who founded the design consultancy IDEO. Design thinking can be describe as a form of solution-focused thinking with the intent of producing a constructive future result. Design thinking identifies and investigates both known and ambiguous aspects of the current situation in an effort to discover parameters and alternative solution sets which may lead to one or more satisfactory goals. Aims of the course: "To introduce the Creative Problems Solving methodology for students "To train the CPS in the learning-by-doing education model "To introduce the methodology of Design Thinking "To train the DT in the learning-by-doing education model

## B. Course syllabus

Process of Creative Problem Solving: Problem finding; Fact finding; Problem definition; Idea finding; Evaluating and selecting; Action planning; Gaining acceptance; Taking action.

Process of Design Thinking: Inspiration; Ideation; Prototyping; Implementation.

#### C. Educational outcome

| Knowledge           | Student zna elementy procesu Creative Problems Solving<br>Student zna elementy procesu Design Thinking<br>Student zna metodykę rozwiązywania problemów w organizacji  |
|---------------------|---|
| Skills              | Student potrafi zastosować proces Creative Problems Solving do konkretnego przypadku z gospodarki.<br>Student potrafi zastosować proces Design Thinking do konkretnego przypadku z gospodarki.<br>Student potrafi zastosować metodykę rozwiązywania problemów w organizacji |
| Social competencies | Student potrafi pracować w zespole.<br>Student rozwija swoją komunikatywność poprzez wyrażanie poglądów w ramach wykonywania<br>zadań.<br>Student uczy się przygotowania i prowadzenia wystąpień publicznych.   |

| D. | Semester | time | table |
|----|----------|------|-------|
|    |          |      |       |

- 1 Process of CPS: Problem finding
- 2 Process of CPS: Fact finding
- 3 Process of CPS: Problem definition
- 4 Process of CPS: Idea finding
- 5 Process of CPS: Evaluating and selecting
- 6 Process of CPS: Action planning
- 7 Process of CPS: Gaining acceptance
- 8 Process of CPS: Taking action
- 9 Process of DT: Inspiration
- 10 Process of DT: Ideation
- 11 Process of DT: Prototyping (phase 1)
- 12 Process of DT: Prototyping (phase 2)
- 13 Process of DT: Prototyping (phase 3)
- 14 Process of DT: Implementation (phase 1)
- 15 Process of DT: Implementation (phase 2)

#### E. Basic literature

1. Alex Osborn, Applied Imagination: Principles and Procedures of Creative Problem Solving, Creative Education Foundation Press, 1953/2001, ISBN 0-930222-73-3 2. Edward de Bono, Lateral Thinking: Creativity Step by Step, Harper & Row, 1973, trade paperback, 300 pages, ISBN 0-06-090325-2 3. Tim Brown. Design Thinking. Harvard Business Review, June 2008.

### F. Supplementary literature

1. Altshuller, Henry. 1994. The Art of Inventing (And Suddenly the Inventor Appeared). Translated by Lev Shulyak. Worcester, Massachusetts: Technical Innovation Center. ISBN 0-9640740-1-X. 2. Rowe, G. Peter (1987). Design Thinking. Cambridge: The MIT Press. ISBN 978-0-262-68067-7.

## G. Author's most important publications concerning the offered course

1. Creative Industries in the Polish Economy: Growth and Operating Conditions. W: Creative Industries in Europe. Drivers of New Sectoral and Spatial Dynamics. Red. C. Chapain; T. Stryjakiewicz. Springer International Publisher AG 2017. s. 151-176. 2. Przemysły kreatywne w Polsce - uwarunkowania i perspektywy, Wydawnictwo Kamon Consulting, Warszawa 2013, s. 170.

## H. Numbers of required prerequisites

not required

| I. Course size and mode |           |                 |           |
|-------------------------|-----------|-----------------|-----------|
|                         | Full-time | Saturday-Sunday | Afternoon |
| Total:                  | 30        | -               | 30        |
| Lecture                 | 30        | -               | 30        |

#### J. Final mark composition

reports 100%

## K. Foreign language requirments

**English** 

## L. Selection criteria

# M. Methods applied

case studies reporty discussions