



## DATA STORYTELLING FOR BUSINESS

### Syllabus

#### Basic information

<p><b>Field of study</b> Economics Electives</p> <p><b>Speciality</b> -</p> <p><b>Organizational unit</b> School of Undergraduate and Graduate Studies</p> <p><b>Study level</b> undergraduate studies</p> <p><b>Study form</b> full-time</p> <p><b>Education profile</b> general academic/practical</p>	<p><b>Didactic cycle</b> 2024/25</p> <p><b>Subject code</b> EKODEKS.L10.1940.24</p> <p><b>Lecture languages</b> English</p> <p><b>Mandatory</b> Elective</p> <p><b>Block</b> Free choice electives</p> <p><b>Department responsible for the subject</b> Department of Labour Market Forecasting and Analysis</p> <p><b>Subject related to scientific research</b> No</p> <p><b>Subject shaping practical skills</b> No</p>	
<p><b>Coordinator</b></p>	Anna Sączewska-Piotrowska	
<p><b>Teacher</b></p>	Anna Sączewska-Piotrowska	
<p><b>Period</b> Semester 5</p>	<p><b>Form of teaching, number of hours and method of examination</b></p> <ul style="list-style-type: none"><li>• lecture: 15, Credit with grade</li></ul>	<p><b>Number of ECTS points</b> 3</p>

## Goals

Code	Goal
C1	Acquiring knowledge and skills enabling the preparation of professional business presentations
C2	Acquiring the ability to design a coherent and convincing narrative around business data
C3	Indicating common mistakes that prevent good presentation of business data

## Recommended requirements

None

## Subject's learning outcomes

Code	Outcomes in terms of	Major learning outcomes for the subject	Examination methods
<b>Knowledge:</b>			
W1	The student determines the rules for creating business presentations	DEK.L_W02	End-of-course assessment - group project
W2	The student selects data visualization methods for business presentations	DEK.L_W02	End-of-course assessment - group project
<b>Skills:</b>			
U1	The student has language skills in English in accordance with the requirements specified for level B2 of the Common European Framework of Reference for Languages	DEK.L_U06	End-of-course assessment - group project
U2	The student uses the acquired knowledge to formulate and solve complex and unusual problems in the field of professional business presentations.	DEK.L_U02	End-of-course assessment - group project
<b>Social competences:</b>			
K1	The student is able to systematically and critically self-assess his/her own knowledge, skills and competences	DEK.L_K01	End-of-course assessment - group project

## Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Before business data visualization - data cleaning and analysis	W1, W2, U1, U2, K1	lecture
2.	Traditional charts used in business presentations	W1, W2, U1, U2, K1	lecture
3.	Modern ways of business data visualization: infographics, dashboards, and more	W1, W2, U1, U2, K1	lecture

No.	Course content	Subject's learning outcomes	Activities
4.	Business data visualization tips - theory and case studies	W1, W2, U1, U2, K1	lecture
5.	From visualization to data storytelling - the differences	W1, W2, U1, U2, K1	lecture
6.	Data storytelling in theory	W1, W2, U1, U2, K1	lecture
7.	Data storytelling in practice	W1, W2, U1, U2, K1	lecture

### Additional information

Activities	Methods of conducting classes
lecture	Lecture using multimedia techniques, Program operation

Activities	Examination method	Percentage
lecture	End-of-course assessment - group project	100%

Activities	Credit conditions
lecture	Obtaining at least 50% of points on the group project

### Literature

#### Obligatory

1. Knaflic C.N. (2020), *Storytelling with data: let's practice!*, Wiley, Hoboken.
2. Knaflic C.N. (2015), *Storytelling with data: a data visualization guide for business professionals*, Wiley, Hoboken.
3. Lee, B., Riche, N.H., Isenberg, P., & Carpendale, S. (2015). More Than Telling a Story: Transforming Data into Visually Shared Stories. *IEEE Computer Graphics and Applications*, 35, 84-90.

#### Optional

1. Midway S.R. (2020). Principles of effective data visualization, *Patterns*, vol. 1., iss. 9, 100141.
2. Sączewska-Piotrowska A. (2021). Comparison of methods of poverty rates measurement [in:] N. Tsounis, A. Vlachvei (eds.), *Advances in longitudinal data methods in applied economic research. 2020 International Conference on Applied Economics (ICOAE)*, Springer, Cham.
3. Zhu S., Sun G., Jiang Q., Zha M., Liang R. (2020). A survey on automatic infographics and visualization recommendations, *Visual Informatics*, vol. 4, p. 24-40.

### Calculation of ECTS points

Activity form	Activity hours*
lecture	15
Preparation of the end-of-course assessment - group project	30
Analysis and interpretation of source materials - statistic data	15
Analysis of lecture notes	15

<b>Student workload</b>	<b>Hours</b> 75
<b>Number of ECTS points</b>	<b>ECTS</b> 3

\* hour means 45 minutes

## Major learning outcomes for the subject

Code	Content
DEK.L_K01	Dokonyuje systematycznej i krytycznej samooceny posiadanej wiedzy, własnych umiejętności i kompetencji oraz oceny odbieranych treści z zakresu ekonomii.
DEK.L_U02	Potrafi wykorzystując posiadaną wiedzę formułować oraz rozwiązywać złożone i nietypowe problemy gospodarcze, a także podejmować decyzje w warunkach niepewności z uwzględnieniem właściwego doboru źródeł, dokonywania ich oceny, syntezy informacji, doboru i stosowania właściwych narzędzi, w tym zaawansowanych technik informacyjno-komunikacyjnych.
DEK.L_U06	Ma umiejętności językowe w zakresie wybranego języka obcego zgodnie z wymaganiami określonymi dla poziomu B2 Europejskiego Systemu Opisu Kształcenia Językowego.
DEK.L_W02	Zna i rozumie metodykę badań w zakresie dyscypliny ekonomia i finanse, w tym zna najważniejsze metody matematyczno-statystyczne i narzędzia informatyczne gromadzenia, analizy i prezentacji danych ekonomicznych i społecznych.