Valid from 2024.HS

Module description: Visualisation and Data Science Storytelling

Module Code	t.BA.DS.VDSS.20HS
ECTS Credits	4
Language of Instruction/Examination	German
Organizational Unit	IDP
Module Coordinator	Manuel Dömer
Legal Framework	The module description is part of the legal basis in addition to the general academic regulations. It is binding. During the first week of the semester a written and communicated supplement can specify the module description in more detail.
Module Characteristic	Type 3a 2 lecture lessons per semester week and class+ 2 lab bi-weekly lessons per semester and half-class
Module Description	This module provides basic knowledge on data visualization and data science storytelling. In practical exercises, you will learn how to a) visualize data with appropriate software and tools and b) communicate effectively with data visualizations.
Module Content	• Visual elements and visualization types • Development of personas • Application and impact of data visualizations • Design of data visualizations • Analysis, interpretation and evaluation of data visualizations and data science stories • Tools and the programming of data visualisations
Prerequisite Knowledge	• Basic programming knowledge in Python

Learning Objectives (Competences)

Students...	Competencies	Taxonomies
are able to describe the target group of their data visualization.	SO, M	K3
are familiar with the visual repertoire of data visualizations and visualization types.	F	K1, K2
are able to visualize data by using tools and appropriate software.	M	K3
can design data visualizations and critically reflect on the result.	M, F, SE	K3, K4, K5, K6
understand the interrelationship between data visualization and storytelling. You can apply this knowledge in the appropriate communication context.	M, F, SO	K2, K3, K4, K5
are able to select the right visualization type for your message.	F	K3, K4, K5
can analyze data visualizations and evaluate their strengths and weaknesses.	F, M	K4, K5, K6
can estimate possible impacts.	F, M	K4, K5, K6

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Performance Assessment

End-of-module exam	Assessment	Length (min.)	Weighting	Form
oral exam	Grade	15	70	acc. to module agreement

Performance assessment during the semester	Assessment	Length (min.)	Weighting	Form
written exam	Grade		15	acc. to module agreement
written exam	Grade		15	acc. to module agreement

Classroom Attendance Requirement

None

Learning material

- Nussbaumer, K. (2015). Storytelling with data. Hoboken: Wiley. ISBN 978-1119002253.
- Wilke, C. (2019). Fundamentals of Data Visualization. A Primer on Making Informative and Compelling Figures. Sebastopol, CA: O'Reilly. ISBN 978-1492031086.

Comments