

Date	Time	Topics
		01 - Overview on digital ecosystem for DH: OCR & NLP Pipelines, Visualization & Dashboards, Spatial Analysis, Image Analysis, Social Network Analysis, Sentiment Analysis, Temporal Series Analysis, SQL and NoSQL, Database Management, RDF triplestores, etc.
Friday 05.03	09:45 - 11:15	02 - The basics of Programming:
	Digital	<ul style="list-style-type: none"> • IDEs and Digital Research Frameworks • Programming Languages: why Python? • First steps into programming <p>Hands on: Installing Anaconda and programming the first “Hello World”</p>
		03 - The basics of Versioning:
Friday 19.03	09:45 - 11:15	<ul style="list-style-type: none"> • Versioning Code: Git, Github, Gitlab • Versioning Data: Dolthub
	Digital	Hands on: Installing Github Desktop. Full cycle on versioning files.
		04 - The basics of Python language I:
Friday 26.03	09:45 - 11:15	<ul style="list-style-type: none"> • Python objects and methods • Python native structures: data containers
	Digital	Hands on: small scripts with native structures.
		05 - The basics of Python language II:
Friday 16.04	09:45 - 11:15	<ul style="list-style-type: none"> • Python control flow • Python functions • Python scopes
	Digital	Hands on: Mining text with simple functions.
		06 - The basics of Python language III:
		<ul style="list-style-type: none"> • Python packages and modules • Python data persistence
Friday 23.04	09:45 - 11:15	Hands on: Exploring common packages from the standard library: os, time, sys, string, pickle, dill, random
	Digital	Suggested readings:
		<ul style="list-style-type: none"> • Python generators and comprehensions
		07 - Advanced topics of Python language:
Friday 30.04	09:45 - 11:15	<ul style="list-style-type: none"> • Python classes and OOP
	Digital	Hands on: Creating classes to represent DH entities
		Suggested readings:

- Python decorators
- Code Optimization

08 - Topics in Exploratory Data Analysis (EDA)

Friday
07.05
09:45 -
11:15
Digital

- Basic Statistics
- Data Visualization
- Data Wrangling

Hands on: Python EDA with Numpy, Pandas, Matplotlib, Seaborn

09 - Topics in Exploratory Data Analysis (EDA)

Friday
14.05
09:45 -
11:15
Digital

- Basic Statistics
- Data Visualization
- Data Wrangling

Hands on: Python EDA with Numpy, Pandas, Matplotlib, Seaborn

10 - NLP Intro:

Friday
21.05
09:45 -
11:15
Digital

- Motivations, Tasks, Goals and Challenges
- NLP and the Humanities
- Python NLP Packages (NLTK, Spacy, TextBlob, Wordnet)

Hands on: Python NLP Pipeline for Corpus Acquisition and Cleaning - Information extraction and Scraping, Regular Expressions, Frequency Analysis, N-grams, POS Tagging, Syntax parsing, NER, Summarization

11 - Topic Modeling,

Friday
28.05
09:45 -
11:15
Digital

Text Classification
Sentiment Analysis

Python NLP Packages (Gensim, PyLDAVis)

Hands on: Python NLP Pipelines for Text Representation (BoW, TfIDf)

12 - Word Embeddings

Friday
04.06
09:45 -
11:15
Digital

Dimensionality Reduction

Text Visualization

Hands on: Detection of Biases in Corpora

13 - Semantic Web Technologies

Friday
11.06
09:45 -
11:15
Digital

- Knowledge Organization Systems
- Thesauri and Ontologies

Hands on: Python and Text Annotation - TEI/XML (XML, LXML, XLPATH)

Friday
18.06
09:45 -
11:15

14 - Social Network Analysis

- Graphs

Digital • Knowledge Graphs,

Hands on: SNA with Python Graph Structures (NetworkX, PyVIS)
15 - Where to go from here:

Friday 09:45 -
25.06 11:15
Digital

- Temporal Series Analysis
- Image analysis and Computer Vision
- Machine Learning and Deep Learning for NLP
- Text Classification
- Text Clustering
- Stylistic Analysis
- Information Extraction
- Information Retrieval Systems