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# **Syllabus**

### **Data Visualization Module**

#### Lecture 1: Introduction to the course

 $Introduction\ to\ the\ Data\ Visualization\ module\ -\ textbooks\ -\ definitions\ and\ terminology\ -\ visual\ perception\ -\ pre-attentive\ attributes\ -\ Gestalt\ principles$ 

 $[21/02/2024] \; [{\color{red} {\bf slides}}]$ 

reading material: Chapter 1 (Munzner 2014)

Lecture 2: Nested model

Analysis framework: nested model - data abstraction (what) - common types of data - task abstraction (why)

[28/02/2024] [slides]

reading material: Chapter 2,3,4 (Munzner 2014)

## Lecture 3: Visual encoding

 $Visual\ encoding\ \hbox{-}\ marks\ and\ channels\ \hbox{-}\ color\ in\ visualization\ \hbox{-}\ color\ palette\ \hbox{-}\ color\ deficiency\ \hbox{-}\ color\ spaces$ 

[06/03/2024] [slides]

reading material: Chapter 5: Marks and Channels, Chapter 10: Map Color and Other Channels (Munzner 2014)

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resources: VizPalette

## Lecture 4: Common charts

Visualize tabular data - common visual idioms and charts - scatterplot - (stacked) bar chart - streamgraph - dot/line chart - Gantt chart - slopegraph - heatmap - radial bar chart - star plot - radar plot - pie chart - coxcomb chart - parallel coordinates - dual-axis charts - Visual vocabulary

 $[13/03/2024] \; [{\color{red}{\bf slides}}]$ 

reading material: Chapter 7: Arrange Tables (Munzner 2014)

resources: Visual Vocabulary

Munzner, T. 2014. Visualization Analysis and Design. AK Peters Visualization Series. CRC Press. https://books.google.it/books?id=dznSBQAAQBAJ.