

Virtual Final Exam quiz guidelines

Our final exam quiz will be a **90 min. online quiz in ICON** on November 9, 2020 from 6:00 to 8:00 pm remotely through ICON and using Zoom for communication and proctoring.

Consequently, students must have the following equipment and environment available:

1. Internet-capable desktop or laptop computer equipped with audio and video (camera) for video conferencing
2. Reliable Internet connection
3. Reduced distraction environment

This online quiz will consist of **20 questions** including multiple choice, multi-select, short-answer, multi short-answer, matching and ordering questions. The exam is **open notes**, however, you will only be allowed to have ICON and Zoom open on your computer. Therefore, it is recommended to use notes pages in hardcopy form (paper, not electronically).

The **order of the questions** and corresponding answer choices will be randomized in order to avoid copying among students. However, each question will clearly identify the context in which it is being asked.

The questions will assess knowledge and understanding of the **topics covered in class and documented on the slide layouts**. Class content that was exclusively covered in the textbook will not be assessed.

The questions are designed to assess your knowledge and understanding of the discussed **fundamental definitions, principles, techniques, methodologies and best practices**. In addition, you will be asked to apply this foundational knowledge to critiquing visualization examples as we did with our social media posts throughout the semester. You will not be required to know specifics of any of the shown or demonstrated visualization tools or systems.

The Final Exam quiz will be **graded along a curve for all students as a percentage of the total points** that can be received. This number will contribute to the final grade with a weight of 20%.

Below find a sample selection of topics for typical questions to be posed:

Visual Perception & Cognitive Issues

- Vision characteristics
- Purpose of Information Visualization
- Key attributes/challenges of Information Visualization
- Pie chart challenges
- Stroop Effect
- Gestalt theory
- Role of rods & cones
- Apparent motion
- Cognitive capacity

Multivariate data, tables and graphs; multi-variate visual representations, time series

- Data tables
- DIKW Pyramid
- Variable types
- Data Visualization Catalogue (<https://datavizcatalogue.com/>)
- Hypervariate data representations
- Few's design guidelines

Tufte's Design Principles

- Lie factor
- Design Principles