Students should be able to:

1. Define the term “visualizations”, and “active vision”.

2. Describe the assumptions underlying visualization.

3. Explain what is meant by “just the right amount of information”. Use the research by Simons and Levin (1998) to support your answer.

4. Explain what is meant by “just in time” processing; and using evidence, tell why it is important.

5. Explain what is meant by “visual thinking”, and why attention is important in visual thinking.

6. Describe the anatomical components and functions of the following entities:
   a. Retina; b. Fovea Centralis; c. Macula; d. Superior & inferior Oblique
   e. Superior, Lateral, Media & Inferior Rectus; f. Rods; and g. Cones

7. Explain what is meant by a “saccade”, and why it is important for visual queries.

8. Explain the complete process of bottom-up processing; and provide an example how all the sub-processes work.

9. Explain the complete process of top-down processing; and provide an example how all the sub-processes work.

10. Explain the functional process of “nested loops”.

11. Using the concept of “distributed cognition” explain how visual thinking can take place inside and outside the head.