Module Title **Perception And Visualisation** **Keywords** Perception, Interface Design, Information visualisation	Reference CM3009 SCQF Level SCQF 9 SCQF Points 15 ECTS Points 7.5 Created December 2002 Approved April 2005 Amended December 2005 Version No. 3

This Version is No Longer Current

The latest version of this module is available <u>here</u>

Prerequisites for Module

CM2003 Dynamic Web Programming or equivalent.

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To provide the student with the ability to understand the basic background and concepts of Information Visualisation and apply this knowledge.

Visual attention. Layering and Separation. Micro/Macro Readings. Narratives. Images, data and words. Space and Time. 2-D and 3-D visualisations. Aesthetics. Avoiding clutter.

Interacting with visualisations.

Indicative Student Workload

Contact Hours	Full Time
Lectures	24
Tutorials/Seminars/Laboratories	24
Assessment	3
Directed Study	
Directed Study	49
Private Study	
Private Study	50

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1. Explain visual perception and how this impacts on design and information display.
2. Describe and compare different methods of displaying a variety of information types.
3. Evaluate and re-design given examples of information visualisation.
4. Develop solutions to display information effectively.

Indicative Module Content

Perception theory. Semiotics. Mapping data to visual representations. Cognitive processes in visualisation.

The visualisation medium, optics, resolution and display. Lightness, brightness, contrast, and colour. Texture.

Mode of Delivery

The module is taught using a structured programme of lectures, tutorials, practical exercises and student-centered learning.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1,2,3,4
Component 2	1,4

Component 2 - Coursework

Component 1 - This is a closed book examination.

Indicative Bibliography

1. WARE,C.,2012.Information Visualization: Interactive Technologies. 3rd ed. Morgan Kaufmann.
2. TUFTE, E., 2001. The Visual Display of Quantitative Information. 2nd ed. USA: Graphics Press.
3. TUFTE, E., 1990. Envisioning Information. USA: Graphics Press.
4. TUFTE, E., 1997. Visual Explanations. USA: Graphics Press.
5. TUFTE, E., 2006. Beautiful Evidence. USA. Graphics Press.