

# Multimedia Cartography and Geographical Visualization 3

## A. Course Identification

- **School:** Mathematical & Geospatial Sci
- **Campus:** City Campus
- **Course Name:** Multimedia Cartography and Geographical Visualization 3
- **Course Code:**
- **Career:** Undergraduate
- **Credit Points:** 12
- **Teacher guided hours (per semester):** 78
- **Learner directed hours (per semester):** 78
- **Duration:** 1 semester
- **Mode of Delivery:**
  - Face-to-Face
- **Course Co-ordinator:**  
Associate Professor William Cartwright
- **Contact Details:**  
Email: [william.cartwright@rmit.edu.au](mailto:william.cartwright@rmit.edu.au)

## B. Course Description

The course provides advanced theory and a practical program for the use of New Media- Interactive multimedia and the World Wide Web (WWW) – to explore the use of a number of methods for the production of hypermapping products. Theory develops an appreciation of the issues confronting users and developers of New Media cartographic products and their delivery to expert users and the general public. Students undertake an individual interactive multimedia project and develop it from original concept to completed product.

## C. Objectives / Learning Outcomes

At the completion of this course students should:

- Appreciate the issues confronting developers of New Media products;
- Be able to design mapping products for use with contemporary communication devices and formats; and
- Be able to undertake the development of a professional cartographic product using contemporary production and delivery techniques.

## **D. Learning Activities**

*What opportunities does the course provide for me to learn? What will I be expected to do?*

### **Learning Activities**

#### **20 x 1hr lectures**

Introduction

Module 1 – Information and information delivery

1. Discrete, Distributed, Online and Ubiquitous geospatial products
2. Spatial Thinking
3. Information provision and use strategies
4. Metaphors and the use of non-map metaphors
5. Tools for Knowledge Discovery and Data Mining
6. Review of Module 1

Module 2 – Product design issues

1. Design issues with Multimedia Cartography
2. Accessibility
3. Privacy and security
4. Cultural and social issues
5. Technical divide
6. Review of Module 2

Module 3 – Product design and delivery

1. Geographical Visualization, New Media and Cartography
2. Multi-platform publishing
3. Facilitating collaboration
4. Open Standards
5. Dynamic generation – map servers
6. Review of Module 3

Review of Course

#### **4 x 3 hr practicals**

Assignment 1 - Mobile (x2)

Assignment 2 - DISTRIBUTED map Servers (x2)

#### **5 x 2 hr studios and 3 x 3 hr studios**

1. Brief
2. Workshop #1: project discussion/ideas
3. Workshop #2: project proposal presentation / Storyboard specifications
4. Workshop #3: presentation of storyboards
5. Workshop #4: project report
6. Workshop #5: demonstration of Alpha product
7. Workshop #6: evaluations / Progress Review
8. Major project presentations

## **E. Assessment**

*How will I demonstrate my learning in this course?*

See below.

### **Assessment Tasks and Value**

Test: 30%

Assignment 1: 10%

Assignment 2: 10%

Project 50%

**Note:** To gain a pass in this course all elements must be satisfactorily completed. i.e. a pass or above for each element must be attained.

### **Submission of Assessment Tasks**

### **Course Grades Available**

H, D, C, P, N

## **F. Academic Administration Procedures**

*What do I do if I need help with deadlines or have become ill?*

Immediately contact the Course Co-ordinator.

## **G. Course Evaluation and Feedback**

*How can I let you know about my experience of this course?*

Provide written comments - email or mail.

## H. Academic Misconduct

### University Plagiarism Statement

Plagiarism: the presentation of the work, idea or creation of another person as though it is your own. It is a form of cheating and is a very serious academic offence that may lead to expulsion from the University. Plagiarised material can be drawn from, and presented in, written, graphic and visual form, including electronic data, and oral presentations. Plagiarism occurs when the origin of the material used is not appropriately cited.

Examples of plagiarism include:

- Copying sentences or paragraphs word-for-word from one or more sources, whether published or unpublished, which could include but is not limited to books, journals, reports, theses, websites, conference papers, course notes, etc. without proper citation;
- Closely paraphrasing sentences, paragraphs, ideas or themes without proper citation;
- Piecing together text from one or more sources and adding only linking sentences;
- Copying or submitting whole or parts of computer files without acknowledging their source;
- Copying designs or works of art and submitting them as your original work;
- Copying a whole or any part of another student's work; and
- Submitting work as your own that someone else has done for you.

Enabling Plagiarism: the act of assisting or allowing another person to plagiarise or to copy your own work.

Advice and activities are available to help you cite and quote your sources correctly, and avoid plagiarism. If you have not already done so, we suggest you work through the activities on the RMIT Learning Skills Unit website, <http://aps.eu.rmit.edu.au/lisu/resources/projects/plagiarism/index.html>.

## I. Learning Resources

### ***What will I need to access and read for this course?***

#### Prescribed References:

Cartwright, W. E., Peterson, M. P. and Gartner, G., 2007, *Multimedia Cartography*, Edition 2, Heidelberg: Springer-Verlag.

#### Recommended References:

[Dykes, J., MacEachren, A. and Kraak, M-J., 2005, \*Exploring Geovisualization\*, Elsevier.](#)

Peterson, M.P.(ed.), 2003, *Maps and the Internet*, Oxford: Elsevier Science Ltd.,

Kraak, M-J and A. Brown, 2000, *Web Cartography*. Taylor and Francis

Professional Journals and contemporary graphics and multimedia magazines and videos.

## J. Student Learning Program

Wk	Lectures	Studios	Practicals
1	<p><b>Introduction to course</b> Tuesday 10.30 – 11.20 12.11.31</p> <p><b>Discrete, distributed, online and ubiquitous geospatial products</b> Tuesday 11.30 – 12.20 12.11.31</p>	<p><b>Brief</b> 2hr Thursday 14.30 – 16.20 12.11.37</p>	
2	<p><b>Spatial Thinking</b> Tuesday 10.30 – 11.20 12.11.31</p> <p><b>Information provision and use strategies</b> Tuesday 11.30 – 12.20 12.11.31</p>	<p><b>Workshop #1: project discussion/ideas</b> 2hrs Thursday 14.30 – 16.20 12.11.37</p>	
3	<p><b>Metaphors and the use of non-map metaphors</b> Tuesday 10.30 – 11.20 12.11.31</p> <p><b>Tools for Knowledge Discovery and Data Mining</b> Tuesday 11.30 – 11.10 12.11.31</p> <p><b>Review Module 1</b> Tuesday 11.10 – 12.20 12.11.31</p>	<p><b>Workshop #2: project proposal presentation / Storyboard specifications</b> 2hrs Thursday 14.30 – 16.20 12.11.37</p>	
4	<p><b>Design issues with Multimedia Cartography</b> Tuesday 10.30 – 11.20 12.11.31</p> <p><b>Accessibility</b> Tuesday 11.30 – 12.20 12.11.31</p>	<p><b>Workshop #3: presentation of storyboards</b> 3hrs Thursday 14.30 – 17.20 12.11.37</p>	
5	<p><b>Privacy and security</b> Tuesday 10.30 – 11.20 12.11.31</p> <p><b>Cultural and social issues</b> Tuesday 11.30 – 12.20 12.11.31</p>		<p><b>Assignment 1A: Mobile – design for small-screen devices</b> 3hrs Thursday 14.30 – 17.20 12.11.37</p>
6	<p><b>Technical Divide</b> Tuesday 10.30 – 11.10 12.11.31</p> <p><b>Review of Module 2</b> Tuesday 11.10 – 11.20 12.11.31</p>	<p><b>Workshop #4: project report</b> 3hrs Thursday 14.30 – 17.20 12.11.37</p>	
7			<p><b>Assignment 1B: Mobile – design for small-screen devices</b> 3hrs Thursday 14.30 – 17.20 12.11.37</p>

8			
9	<b>Geographical Visualization, New Media and Cartography</b> Tuesday 10.30 – 11.20 12.11.31		<b>Assignment #2A: Map Servers</b> 3hrs Thursday 14.30 – 17.20 12.11.37
10	<b>Open Standards</b> MAB Tuesday 10.30 – 11.20 12.11.31 <b>Dynamic generation – map servers</b> MAB Tuesday 11.30 – 12.20 12.11.31	<b>Workshop #5: demonstration of Alpha product</b> 2hrs Thursday 14.30 – 16.20 12.11.37	
11	<b>Multi-platform publishing</b> Tuesday 10.30 – 11.20 12.11.31 <b>Facilitating collaboration</b> Tuesday 11.30 – 12.20 12.11.31		<b>Assignment #2B: Map Servers</b> 3hrs Thursday 14.30 – 17.20 12.11.37
12	<b>Directions in Multimedia Cartography and Geographical Visualization</b> Tuesday 10.30 – 11.20 12.11.31 <b>Review of Module 3 and Review of course</b> Tuesday 11.30 – 12.20 12.11.31	<b>Workshop #6: evaluations / Progress Review</b> 2hrs Thursday 14.30 – 16.20 12.11.37	
13	<b>Test</b> Tuesday 10.30 – 12.20 12.11.31	<b>Major project presentations</b> 3hrs Thursday 14.30 – 17.20 12.11.37	

**Version 2**

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Professor William Cartwright March 1, 2007

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