

# School of Information Management

# ELCM353 INTERNET DEVELOPMENT ENVIRONMENTS

Trimester One 2012

# **COURSE OUTLINE**

# **Class Times and Room Numbers**

**Lecture:** RHLT03 Tuesday 11:30 -12:20 **Office Hours:** Thursday & Friday 9am – 10am

**Workshop:** RWW415 <a href="https://signups.victoria.ac.nz">https://signups.victoria.ac.nz</a>

#### **Names and Contact Details**

| Role                      | Name            | Room  | Tel.    | E-mail               |
|---------------------------|-----------------|-------|---------|----------------------|
| <b>Course Coordinator</b> | Dr Tiong T. Goh | RH403 | 4636860 | Tiong.goh@vuw.ac.nz  |
| Senior Tutor              | Mr. Alex Zhang  | RH502 | 4636998 | Alex.Zhang@vuw.ac.nz |

# **Assessment Requirements**

| Tasks               | Learning Objectives | <b>Due Date</b>  | Percentage |
|---------------------|---------------------|------------------|------------|
| Assignment 1        | LO1,2               | 27/4 11am        | 20         |
| Class Test 1        | LO1,2               | 3/5 evening      | 20         |
| Assignment 2        | LO1,2,3,4           | 5/6 11am         | 20         |
| Class Test 2        | LO1,2,3,4           | 7/6 evening      | 30         |
| Workshop submission | LO1,2,3,4           | Following Monday | 10         |
|                     |                     | 11am             |            |
| Total               |                     |                  | 100        |

# **Trimester Dates**

Teaching Period: Monday 5 March – Friday 8 June

# **Examinations**

There is no final exam.

# **Mandatory Course Requirements**

To pass ELCM353, students must have:

- 1. Attended at least 10 lectures.
- 2. Attended at least 6 workshops.

#### **Readings**

The following textbook is required and can be purchased from Vic bookshop.

New Perspectives on XML, Second Edition, Comprehensive (9781418860646) Patrick Carey ISBN 13: 978-1-4188-6064-6 © 2007

# **Course Content**

The objective of the course is to introduce students to the development of advanced World Wide Web and Internet-based technologies. This course examines modern and emerging technologies to develop and deploy e-commerce applications, specifically based on the eXtensible Markup Language (XML).

| Week<br>No. | Date | Lecture  | Workshop  | Readings | Tests &<br>Assignments |
|-------------|------|--|---|----------|------------------------|
| 1           | 6/3  | Creating an XML Document                             |   | T 1      |                        |
| _           |      |  |   |          |                        |
| 2           | 13/3 | Working with Namespaces                              | Workshop 1 Developing an XML Document for the Jazz Warehouse          | T2       |                        |
| 3           | 20/3 | Validating an XML Document working with DTD I        | Workshop 2 Combining XML Vocabularies in a Compound Document          | Т3       |                        |
| 4           | 27/3 | Validating an XML<br>Document working with<br>DTD II | Workshop 3 Working with Document Type Definitions                     | Т3       |                        |
| 5           | 2/4  | Working with Cohomog I                               |   | T4       |                        |
| 3           | 3/4  | Working with Schemas I                               |   | 14       |                        |
|             |      | 1  | BREAK   | T        |                        |
| 6           | 24/4 | Working with Schemas II                              |   | T4       | Assignment 1 due       |
| 7           | 1/5  | Working with XSLT and XPath I                        | Workshop 4 Validating Documents with XML Schema                       | Т6       |                        |
|             | 3/5  |  |   |          | Class test #1          |
| 8           | 8/5  | Working with XSLT and XPath II                       | Workshop 5 Transforming an XML Document                               | Т6       |                        |
| 9           | 15/5 | Creating a Computational<br>Style Sheet I            | Workshop 6<br>Working with Functions,<br>Variables, and Parameters(I) | Т7       |                        |
| 10          | 22/5 | Creating a Computational<br>Style Sheet II           | Workshop 7 Working with Functions, Variables, and Parameters(II)      | Т8       |                        |
| 11          | 29/5 | Creating Element Groups                              | Workshop 8<br>Working with IDs, Keys, and<br>Groups                   | T10      |                        |
| 12          | 5/6  | Working with the Document<br>Object Model            |   | Supp     | Assignment 2 due       |
|             | 7/6  | 4  |   |          | Class test # 2         |

**Course Learning Objectives** 

| Learning objectives | By the end of this course, students should be able to: | Graduate<br>Attributes | Major<br>Attributes |
|---------------------|--|------------------------|---------------------|
| LO1                 | read and manipulate XML content.                       | LG1 LG2                | MA3                 |
|                     |  | LG4 LG5                | MA4                 |
| LO2                 | apply XML in a modern, complex web-based               | LG1                    | MA3                 |
|                     | application.   | LG2 LG5                |                     |
| LO3                 | use XML based tools.                                   | LG1                    | MA3                 |
|                     |  | LG4 LG5                |                     |
| LO4                 | compare and contrast technologies for the              | LG1 LG5                | MA6                 |
|                     | development of web-based applications.                 |                        |                     |

# **Course Delivery**

Students are expected to complete the assignments in order to understand the concepts and theories taught during lectures. Students should also prepare for the workshop and tutorial prior to their allocated time. Class test and workshop test will evaluate and assess your understanding about the theories, concepts and technologies learnt throughout the course.

## **Expected Workload**

In terms of weekly course workload, expect to spend one hour in each lecture, two hours in each workshop, one hour in each tutorial and about seven to ten hours working on your own per week in preparation for lectures, workshops, tutorials, assignment, tests and project.

# **Materials and Equipment**

Students are *expected to have the following* for each computer workshop:

- A computer account by the first week of the term
- A storage device to save all work
- Read the workshop requirement prior to their allocated workshop time

#### Withdrawal from Course

- 1. Your fees will be refunded if you withdraw from this course on or before Friday 16 March 2012.
- 2. The standard last date for withdrawal from this course is *Friday 18 May*. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an 'Application for Associate Dean's Permission to Withdraw Late' including supporting documentation.

The application form is available from either of the Faculty's Student Customer Service Desks.

# **Quality Assurance Note**

Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and audit purposes. The findings may be used to inform changes aimed at improving the quality of FCA programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

#### **Practicum Arrangements**

Workshop and tutorial slot will be available on the sign-up system:

https://signups.victoria.ac.nz

You must select only one time slot that fits your timetable.

#### **Penalties**

In fairness to other students, late work will incur a 10% penalty (of the value of the project/assignment) for each calendar day late. Work that is more than 3 days late will not be accepted without a granted extension. **Extensions to project/assignment deadlines are not ordinarily granted**. Discuss with the Course Coordinator any extraordinary personal circumstances which affect your ability to meet the deadline. You will be asked to verify your claim, e.g., produce medical certificates.

# **Class Representative**

A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the Course Coordinator and the class. The class representative provides a communication channel to liaise with the Course Coordinator on behalf of students.

#### **Communication of Additional Information**

All notices relating to this course will be posted on Blackboard. www.blackboard.vuw.ac.nz

# For the following important information follow the links provided:

# **Academic Integrity and Plagiarism**

http://www.victoria.ac.nz/home/study/plagiarism.aspx

# **General University Policies and Statutes**

Find key dates, explanations of grades and other useful information at www.victoria.ac.nz/home/study

Find out about academic progress and restricted enrolment at <a href="http://www.victoria.ac.nz/home/study/academic-progress.aspx">http://www.victoria.ac.nz/home/study/academic-progress.aspx</a>

The University's statutes and policies are available at <a href="http://www.victoria.ac.nz/home/about/policy">www.victoria.ac.nz/home/about/policy</a>, except qualification statutes, which are available via the Calendar webpage at <a href="http://www.victoria.ac.nz/home/study/calendar.aspx">http://www.victoria.ac.nz/home/study/calendar.aspx</a> (See Section C).

Further information about the University's academic processes can be found on the website of the Assistant Vice-Chancellor (Academic) at

www.victoria.ac.nz/home/about victoria/avcacademic/default.aspx

# AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support

http://www.victoria.ac.nz/home/about\_victoria/avcacademic/Publications.aspx

# **Faculty of Commerce and Administration Offices**

http://www.victoria.ac.nz/fca/studenthelp/

# Te Pūtahi Atawhai Maori and Pacific Mentoring Programme

http://www.victoria.ac.nz/st\_services/tpa/index.aspx

| Assignment 1 Rubric –                       | 20% contribution towards overall assessment                 |       |
|---|---|-------|
| Topic                                       |   | Marks |
| Creating an XML Document                    | Correctly write and explain the issues and provide solution | 20    |
| Working with<br>Namespaces                  | Correctly present an effective solution                     | 20    |
| Validating an XML Document working with DTD | Correctly identify and provide effective solution           | 30    |
| Working with Schemas                        | Correctly generate the solution                             | 30    |
|   | Total   | 100   |

| Class Test 1 Rubric – 20% contribution towards overall assessment |   |       |
|---|---|-------|
| Topic   |   | Marks |
| Creating an XML Document  | Correctly write and explain the issues and provide solution | 20    |
| Working with<br>Namespaces  | Correctly present an effective solution                     | 20    |
| Validating an XML Document working with DTD                       | Correctly identify and provide effective solution           | 30    |
| Working with Schemas  | Correctly generate the solution                             | 30    |
|   | Total   | 100   |

| Assignment 2 Rubric – 2                    | 20% towards overall assessment                              |       |
|--|---|-------|
| Aspect                                     |   | Marks |
| Working with XSLT and XPath                | Correctly write and explain the issues and provide solution | 20    |
| Creating a<br>Computational Style<br>Sheet | Correctly present an effective solution                     | 30    |

| Creating Element      | Correctly identify and provide effective solution           | 20  |
|-----------------------|---|-----|
| Groups                |   |     |
| XX 1' '41 41          |   | 20  |
| Working with the      | Correctly generate an effective solution                    | 20  |
| Document Object Model |   |     |
| Working with Schemas  | Correctly write and explain the issues and provide solution | 10  |
|                       |   |     |
|                       |   |     |
|                       | Total   | 100 |
|                       |   |     |
|                       |   |     |

| Class Test 2 Rubric – 30                          | 0% contribution towards overall assessment                  |       |
|---|---|-------|
| Topic   |   | Marks |
| Creating an XML Document                          | Correctly write and explain the issues and provide solution | 10    |
| Working with<br>Namespaces                        | Correctly present an effective solution                     | 10    |
| Validating an XML<br>Document working with<br>DTD | Correctly identify and provide effective solution           | 10    |
| Working with Schemas                              | Correctly generate the solution                             | 10    |
| Working with XSLT<br>and XPath                    | Correctly write and explain the issues and provide solution | 20    |
| Creating a Computational Style Sheet              | Correctly present an effective solution                     | 20    |
| Creating Element<br>Groups                        | Correctly identify and provide effective solution           | 10    |
| Working with the Document Object Model            | Correctly generate an effective solution                    | 10    |
|   | Total   | 100   |