### VICTORIA UNIVERSITY OF WELLINGTON

Te Whare Wānanga o te Ūpoko o te Ika a Māui



# School of Information Management

# **ELCM353 Internet Development Environments**

## Trimester 1 2007

# **COURSE OUTLINE**

#### **Contact Details**

Lecturer: Joerg Evermann Phone: 04 463 6857

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Office: Easterfield Bldg 214

### **Class Times and Room Numbers**

### Classes

Room: MY LT 220 (Murphy Building)

Time: Wed 16:10 - 18:00

## Computer Lab Workshops

There will be a two-hour computer lab workshop in the SIM computer lab in MY 201. You must sign-up for either:

Thursdays, 9am to 11am or Fridays, 9am to 11am

## **Course Objectives**

The objective of the course is to introduce students to the development of advanced World Wide Web and Internet-based web-based application. This course examines modern and emerging technologies to develop and deploy such applications, specifically based on the extensible Markup Language (XML), the emerging standard to describe most kinds of content.

At the end of the course, students will have good knowledge of

- XML and XML based description languages
- Different ways of reading and manipulating XML content
- How to use XML in a modern, complex web-based application
- Practical skills using XML based tools

## **Course Content**

| Wk | Topic                            | Textbook | Assignment          | Write-Up  | Date   |
|----|----------------------------------|----------|---------------------|-----------|--------|
|    |                                  | Chapters | Due                 | Topic     |        |
| 1  | Introduction to XML              | 1 - 2    |                     |           | Feb 28 |
| 2  | XML Namespaces                   | 3        |                     | XMPP      | Mar 7  |
|    | XML Schema                       | 5        |                     | <u>or</u> |        |
|    |                                  |          |                     | SMIL      |        |
| 3  | XSLT and XPath                   | 7 - 8    | XML                 |           | Mar 14 |
|    |                                  |          | Schema              |           |        |
| 4  | More XSLT and XPath              | 7 - 8    |                     | ebXML     | Mar 21 |
| 5  | Advanced XSLT                    | 7 - 8    |                     | XSL-FO    | Mar 28 |
|    |                                  |          |                     |           |        |
|    |                                  | Reading  |                     | <u>or</u> |        |
|    |                                  | Package  |                     |           |        |
|    |                                  |          |                     | DocBook   |        |
| 6  | Introduction to Cocoon           | Reading  | XSLT                |           | Apr 4  |
|    |                                  | Package  |                     |           |        |
| 7  | ANZAC DAY : NO CLASS OR WORKSHOP |          |                     |           | Apr 25 |
| 8  | XForms                           | 19       |                     | OWL       | May 2  |
| 9  | SVG                              | 18       |                     | HL7       | May 9  |
|    |                                  |          |                     | <u>or</u> |        |
|    |                                  |          |                     | OFX       |        |
| 10 | SAX & DOM<br>Processing          | 11       | XForms              | xBRL      | May 16 |
|    |                                  |          |                     | <u>or</u> |        |
|    |                                  |          |                     | BizTalk   |        |
| 11 | XQuery and XML<br>Databases      | 9 - 10   | SVG                 |           | May 23 |
| 12 | Web-Services                     | 14 - 15  | XQuery and Database |           | May 30 |

# Readings

# Textbook (required)

Hunter, David et al. (2004) Beginning XML (3rd Edition), Wrox Publishing.

# Reading package (required)

A reading package with additional material is available through the student notes distribution center.

## **Materials and Equipment**

All software will be made available in SIM computer labs. You will need a valid SCS computing account. Note: All software used is open source software and freely obtainable.

## **Assessment Requirements**

- 1. Assignments (5 assignments @ 10.4% each = 52%)
- 2. Weekly write-ups (6 write-ups @ 8% each = 48%)
  - Between three and four pages (typed, Word format, 1.5 line space, 11pt font, 1 inch margins) about a particular XML application in e-commerce (see schedule on previous page). You are free to choose an XML application/standard not on the list.
  - O Some guidelines on what you could comment on. You are free to deviate from this.
    - What is the standard used for?
    - o What is its history?
    - Who is involved in creating/maintaining the standard?
    - o How widely is it used? Who is using it?
    - Are there software implementations for the standard?
    - Why, where and how is the standard useful for e-business applications?
    - What is particularly interesting about the standard, if anything?
    - What could/should be improved in, or added to, the standard?
  - Write-ups will be evaluated on the following:
    - o Is it well written (Structure, spelling & grammar)?
      - 30% marks
    - o Insightfulness (Do you know what you're talking about? Are you knowledgeable? In-depth rather than superficial)
      - 50% marks
    - o Criticality (Have you applied critical thinking? Critique what you read)
      - 20% marks
  - o All write-ups must cite the sources they have been taken from: books, articles, etc. NO WIKIPEDIA. Use the library and the electronic resources there!
  - All write-ups must be submitted through www.turnitin.com and will be scanned for plagiarism. Instructions for the use of turnitin.com will be given during the first class. Turnitin will not accept submissions after 4:10pm on the due date (before class).

#### **Penalties**

Late submission of assignments or write-ups will lead to 20% reduction in marks for every day late (including weekends and holidays). Late submission after 3 days will result in failure of the assessment item.

## **Mandatory Course Requirements**

- 1. You must pass each assignment with at least 50%.
- 2. You must pass each write-up with at least 50%.
- 3. You must pass the overall course with at least 50%.
- 4. You must attend and demonstrate satisfactory performance in at least 9 of the 11 workshops.

### **Communication of Additional Information**

There will be a BlackBoard site for this course. You are required to check BlackBoard at least twice per week for notices and additional course materials.

You must have a valid SCS email account. Your lecturer will communicate with you only using SCS email accounts. You are required to check your SCS email account at least every other day.

## **General University Policies and Statutes**

Students should familiarise themselves with the University's policies and statutes, particularly those regarding assessment and course of study requirements, and formal academic grievance procedures.

### **Student Conduct and Staff Conduct**

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps can be taken if there is a complaint. For queries about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor. This Statute is available in the Faculty Student Administration Office or on the website at: <a href="https://www.vuw.ac.nz/policy/StudentConduct">www.vuw.ac.nz/policy/StudentConduct</a>.

The policy on Staff Conduct can be found on the VUW website at: <a href="https://www.vuw.ac.nz/policy/StaffConduct">www.vuw.ac.nz/policy/StaffConduct</a>.

#### **Academic Grievances**

If you have any academic problems with your course you should talk to the tutor or lecturer concerned or, if you are not satisfied with the result of that meeting, see the Head of School or the Associate Dean (Students) of your Faculty. Class representatives are available to assist you with this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Policy which is published on the VUW website:

www.vuw.ac.nz/policy/AcademicGrievances.

## **Plagiarism**

Victoria University defines plagiarism as the copying of ideas, organisation, wording or anything else from another source without appropriate reference or acknowledgement so that it appears to be one's own work. This includes published and unpublished work, the Internet and the work of other students and staff. Plagiarism is an example of misconduct in the Statute of Student Conduct. Students who have plagiarised are subject to a range of penalties under the Statute. See the website: www.vuw.ac.nz/policy/StudentConduct.

### **Students with Disabilities**

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities an equal opportunity with all other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, then please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services to confidentially discuss your individual needs and the options and support that are available. Disability Support Services are located on Level 1, Robert Stout Building, or phoning 463-6070, email: <a href="mailto:disability@vuw.ac.nz">disability@vuw.ac.nz</a>. The name of your School's Disability Liaison Person can be obtained from the Administrative Assistant or the School Prospectus.

### **Student Support**

Staff at Victoria want students' learning experiences at the University to be positive. If your academic progress is causing you concern, please contact the relevant Course Co-ordinator, or Associate Dean who will either help you directly or put you in contact with someone who can.

The Student Services Group is also available to provide a variety of support and services. Find out more at <a href="www.vuw.ac.nz/st-services/">www.vuw.ac.nz/st-services/</a> or email <a href="student-services@vuw.ac.nz">student-services@vuw.ac.nz</a>.

VUWSA employs two Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and faculty delegates. The Education Office is located on the ground floor, Student Union Building, phone 463 6983 or 463 6984, email education@vuwsa.org.nz.