Unit Outline: KXC281 Advanced Web Development

September 2004 - January 2005
Fuzhou, China

Prerequisites
KXC151
Corequisites
None
Unit Weight
12.5% of one academic year
Unit Coordinator
Dr. Byeong Ho Kang
Lecturing Staff
Xiufeng Jiang (Lecturer)
Email: jiangxiufeng@ien-start.com
Kehua Guo (Tutor)
Email: guokehua@163.com
Details of Teaching Arrangements
Lectures: 3 hr/wk
Tutorials: 1 hr/wk (from week 2)
Unit Website
The unit website is accessed from http://webct.utas.edu.au:8900/. You will need to use your University of Tasmania email pop account username and password to log on to the WebCT system. Once authenticated by the system your personalised MyWebCT area will be displayed. It contains links to the websites that you have permission to access - including the website for this unit.
This unit is Web Dependent: content. This means that you will need to use the Web for this unit. The unit website contains unit information and resources.
If you are not able to access the unit website, please contact the IEN-Start Institute administration office.

University Website
Information and Resources for 'Current Students' are available on the university website at: http://www.utas.edu.au/students/
Provider
School of Computing - Faculty of Science, Engineering, and Technology.
http://www.comp.utas.edu.au/ienstart

OVERVIEW

Introduction
In this unit, you will be programming interactive web interfaces and learning the concept of web technology. You will learn how to program server scripts as well as how to link web sites to databases. Assignments require you to demonstrate practical ability in these areas.

Prior Learning
HTML knowledge will help to follow this unit although the basic HTML will be covered.

Learning Outcomes
On successful completion of this unit, you will be able to:
1. demonstrate a broad understanding of the creation of dynamic web content through server-side programming;
2. learn simple CGI scripts in the Perl scripting language;
3. write complex PHP scripts that generate dynamic web pages from a combination of static HTML and database content;
4. interact with databases through the SQL language.

Unit Content
Internet:
1. TCP/IP protocol
2. HTTP protocol

Server-side:
1. Unix
2. Apache Web Server
3. CGI
4. Server-scripting

Programming Languages:
1. Perl (basic)
2. PHP (extensive)
3. SQL (basic)

Others Topics:
1. Cookies
2. Streaming video (Optional)
3. Java Server Pages
4. Security Issues
5. XML

For more information see the section titled 'Content' on the unit website.

Generic Skills

The university has defined a set of generic graduate attributes expected in its graduates. http://www.utas.edu.au/policy/subject.html#graduates Your course is designed to enable you to develop generic skills that are valued in, and expected of, graduates. These are skills that you will need to develop over time. Hence you are encouraged to look for opportunities, as you study each unit, to reflect on and improve these skills.

LEARNING AND TEACHING

Approach to Learning
You are expected to spend about 130 hrs studying in this unit - this includes attendance at scheduled teaching sessions. (For a 13 week semester this is, on average, 10 hr/wk.) This is the amount of study time that the ‘typical’ student will need to reach the level of competence and understanding required to fulfil the unit objectives.

You are expected to:
- attend all scheduled lectures and tutorials, unless otherwise notified by the unit coordinator
- prepare for, and actively participate in lectures and tutorials
- complete the assigned learning tasks
- review what has been learnt
- complete assessment items and submit them on time
- access and be familiar with the information and resources available on the unit website
- seek help from teaching staff if you have any questions or difficulties in studying this unit

You are encouraged to read the university’s Code of Conduct for Teaching and Learning. Part A describes the ‘Responsibility of the University to Students’ and part B describes the ‘Responsibilities of Students to the University’. http://www.utas.edu.au/tl/policies/codes.html

Schedule
See the 'Schedule' section on the unit website.

Teaching and Support Staff

Teaching Staff

Unit Coordinator:
Dr. Byeong Ho Kang
E-Mail: Byeong.Kang@utas.edu.au

Lecturing Staff
Xiufeng Jiang (Lecturer)
Email: jiangxiufeng@ien-start.com

Kehua Guo (Tutor)
Email: guokehua@163.com

School Help Desk

Contact the IEN-Start Institute administration office if you have any queries or problems with accessing, using, or printing from the computers in the Computer labs.

University Services and Support

The University has staff available to assist you, such as the:
- Learning Development Advisor
- Student Counselor
Resources

Unit Website

The unit website contains unit information and resources.

Prescribed Text


OR other Web Programming books using PHP and MySQL

Readings


Andy, Harris, *PHP/MySQL Programming for absolute beginner*, Premier Press

Tony Butzaon, *PHP by example*, QUE


Software

The software that you will need to access the unit website and to study this unit, including general purpose software such as word processors, is provided on the computers in the computing labs. If you intend to use software on other computers please check that the versions are compatible.

ASSESSMENT

Assessment Items

Item 1

**Title:** Assignment 1

**Type:** In-Semester - individual assignment

**Weighting:** 15%

**Due:** Wednesday 10 November, at noon

Item 2

**Title:** Assignment 2

**Type:** In-Semester - individual assignment

**Weighting:** 25%

**Due:** Wednesday 15 December, at noon

Item 3

**Title:** Exam

**Type:** Formal Examination

**Weighting:** 60%

**Due:** University Examination Period

See the 'Assessment' section in unit website for more detailed information about assessment items.

In-Semester Assessment

Unless specifically stated in the specification of the assessment item provided on the unit website, it is required that:

- work submitted by a student is the work of that student alone OR
- where the assessment item is to be completed by a group of students, the work submitted by the group of students is the work of that group of students alone.

Plagiarism

Plagiarism is a form of cheating. It is taking and using someone else's thoughts, writings or inventions and representing them as your own, for example:

- using an author's words without putting them in quotation marks and citing the source;
- using an author's ideas without proper acknowledgment and citation; or
- copying another student's work.
If you have any doubts about how to refer to the work of others in your assignments, please consult your lecturer or tutor for relevant referencing guidelines, and the academic integrity resources on the web at http://www.utas.edu.au/tl/supporting/academicintegrity/index.html.

The intentional copying of someone else’s work as one’s own is a serious offence punishable by penalties that may range from a fine or deduction/cancellation of marks and, in the most serious of cases, to exclusion from a unit, a course or the University. Details of penalties that can be imposed are available in the Ordinance of Student Discipline – Part 3 Academic Misconduct, see http://www.utas.edu.au/policy/subject.html#students.

The University reserves the right to submit assignments to plagiarism detection software, and might then retain a copy of the assignment on its database for the purpose of future plagiarism checking.

**Referencing**

The university document on plagiarism contains information about referencing the work or ideas of others. (See http://www.utas.edu.au/plagiarism/) The preferred text referencing systems for the School is the Harvard system (also referred to as the author-date system).

**Submissions**

The details of the submission method (paper, electronic or other) for each assignment will be supplied in a separate assignment specification sheet. All in-semester assignment submissions (including electronic submissions) are to include an Assignment Cover Sheet which includes a statement confirming that the submission is your own work. If this undertaking is not signed, the assignment will not be marked. The Assignment Cover Sheet is available on the School’s web site http://www.comp.utas.edu.au/app/studyresources.jsp.

**Extensions and Penalties**

Assessment items will not be accepted after the due date except under the conditions stated in the school policy on late assessment. http://www.comp.utas.edu.au/app/late_assess.jsp

**Formal Examination**

The formal examination will be held at the IEN-Start Institute, and is conducted by the University Registrar.

**Final Grade**

Overall assessment will be based on the student's performance throughout the semester as well as in a formal examination. In order to achieve a pass (or better) result, a student must obtain:

1. at least 40% of the total mark for in-semester assessment items
2. at least 40% of the mark for the formal examination
3. at least 50% of the overall mark

Passing grades will be awarded based on the AVCC guidelines:

- PP at least 50% of the overall mark but less than 60%
- CR at least 60% of the overall mark but less than 70%
- DN at least 70% of the overall mark but less than 80%
- HD at least 80% of the overall mark

The maximum mark awarded to a student who fails the unit will be 44.

For more information, including other grades such as Supplementary and Terminating grades, see the School of Computing's guidelines for assessment - available at: http://www.comp.utas.edu.au/app/assess.jsp