Unit Outline 2011
Faculty of Information Sciences and Engineering

Unit Title: Web Design and Programming G, Web Design and Programming
Unit Number: 6691, 7175
This Unit Outline must be read in conjunction with:

a) *UC Student Guide to Policies*, which sets out University-wide policies and procedures, including information on matters such as plagiarism, grade descriptors, moderation, feedback and deferred exams, and is available at *(scroll to bottom of page)*

b) *UC Guide to Student Services*, and is available at *(scroll to bottom of page)*

c) Any additional information specified in section 6h.

### 1: General Information

1a **Unit title**  
Web Design and Programming G  
Web Design and Programming

1b **Unit number**  
6691  
7175

1c **Teaching Period and year offered**  
Semester 2, 2011

1d **Credit point value**  
3

1e **Unit level**  
G (6691) and UG (7175)

1f **Name of Unit Convener and contact details (including telephone and email)**  
Convener: Dr Wanli Ma, 6201 2838, Wanli.Ma@canberra.edu.au, Office 11B45; AProf Dat Tran, 6201 2394, Dat.Tran@canberra.edu.au, Office 11B17  
Moderator: Prof. Dharmendra Sharma, 6201-2153, Dharmendra.Sharma@canberra.edu.au, Office 11B13

1g **Administrative contact details (including name, location, telephone and email)**  
The Faculty Administrative Officers at 11B14, Ph: 62012153/62012417, email: ise@canberra.edu.au.
2: Academic Content

2a Unit description and learning outcomes
This unit provides the principles and skills of web application development. It arms students with current web programming technology and the skills for developing web oriented applications.

Upon successful completion of this unit, the student will have essential skills to develop web oriented applications. The students will also gain self development skills and problem solving skills in these areas. Students will be able to demonstrate an understanding of the principles and practical skills in the following areas:
1. Internet and web application structures,
2. Web applications with database,
3. accessibility,
4. security and legal issues.

2b Generic skills
This unit addresses and promotes the UC graduate attributes on generic skills and attributes as listed in “Generic skills and attributes of University of Canberra graduates from undergraduate and postgraduate coursework courses” https://guard.canberra.edu.au/policy/policy.php?pol_id=3030. Generic skills that will be promoted and assessed (some of them) in this unit are:
1. Communication skills
2. Information Literacy and Numeracy
3. Problem solving
4. Lifelong Learning
5. Professional Ethics
6. Personal Attributes

2c Prerequisites and/or co-requisites
Software Technology 1 for Web Design and Programming (7175)
Computers & Programming G and Database Design G for Web Design and Programming G (6691)

3: Delivery of Unit and Timetable

3a Delivery mode
This subject is delivered on campus with lectures and tutorials/labs as per UC timetable.

3b Timetable of activities, such as lectures/ tutorials/ practicals/ field classes, showing key dates and topics (Information might be provided in the form of a table)

<table>
<thead>
<tr>
<th>Wk</th>
<th>Activity</th>
<th>Wk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Note: this is a proposed schedule with informative value only</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Introduction, Information Architecture, page layout, and Typography (Paul Wang: Ch 5)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Design Basics (Paul Wang: Ch1, 4), A Common Sense Approach to Web Page Design and Usability (Steve Krug)</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Visual Studio, ASP.NET: Web Application Templates, Theme and Master Page</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>A Common Sense Approach to Web Page Design and Usability (Steve Krug)</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>HTML (Paul Wang: Ch2, 3, 8) and Cascading Style Sheets (Paul Wang: Ch 6)</td>
<td>5</td>
</tr>
</tbody>
</table>
6 JavaScript and DOM (Paul Wang: Ch 9, 10) and AJAX, HTML5 and Summary

7 C# Programming, XAML for Silverlight, WCF Services

8 class free period

9 ASP.NET: Navigation, Deployment, State Management, Web Forms, Server Controls, HTML5

10 ADO.NET, Data Controls, XML

11 LINQ, Silverlight

12 Form Authentication, Windows Authentication, Authorisation

13 Web Parts, Graphics, Charting, Globalisation, Review

14 Programming Security, Summary

4: Unit Resources

4a Lists of required texts/readings

Text Books:


A useful web site:
W3 Schools: http://www.w3schools.com/

Online materials:
Lecture materials, tutorial questions and answers, assignment specifications, and other related information are available from http://learnonline.canberra.edu.au.

4b Materials and equipment
Computers and software in Building 11 laboratory are used in this unit. The use of private personal computers and relevant software is beneficial, but not essential.

4c Unit website
http://learnonline.canberra.edu.au

5: Assessment

5a Assessment overview

<table>
<thead>
<tr>
<th>Assessment item (including exams held in the exam period)</th>
<th>Due date of assignments</th>
<th>Weighting (total to equal 100%)</th>
<th>Addresses learning outcome(s)</th>
<th>Addresses generic skill(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>23:55, Wk 7, 30/09/2011</td>
<td>20%</td>
<td>1-3</td>
<td>1-4</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>23:55, Wk 14, 18/11/2011</td>
<td>20%</td>
<td>1-4</td>
<td>1-4</td>
</tr>
<tr>
<td>Final Exam</td>
<td>As per University exam timetable</td>
<td>60%</td>
<td>1-4</td>
<td>1-4</td>
</tr>
</tbody>
</table>
5b  Details of each assessment item
Assignment 1: concerning Web page design, Cascading Style Sheets, and JavaScript.
Assignment 2: concerning ASP.NET, Web Forms, Web Controls and Web Service. Further
details are provided through assignment requirements on Moodle.
Final Examination: 3 hours, closed book; permitted materials: cheat sheets are not allowed.

5c  Special assessment requirements
An assignment is required to be submitted by the due date. If for any reason you are unable to
complete your assignment by the due date you must submit, to the lecturer, a request for an
extension in writing before the due date (unless impossible) setting out in detail the genuine
and exceptional reason for requesting the extension. If there is a medical or counselling reason
for the extension request it must be accompanied by a medical or counselling certificate which
clearly states:
- that you were unfit to complete the assignment;
- the date of the medical or counselling consultation; and
- the period for which you were / are / will be unfit to complete the assignment.

Late submission will attract penalties:
- 1 calendar day after the submission deadline, 2 marks penalty, which equals to 2% of
  the total marks of the unit.
- 2 calendar days after the submission deadline, 4 marks penalty, which equals to 4% of
  the total marks of the unit.
- After 2 calendar days, for each extra calendar day, 3 marks penalty, which equals to
  3% of the total marks of the unit, until up to the full marks of the assignment.

If there is any doubt with regard to the requirements of any assignment or assessment
procedure, the onus for clarifying the issue rests with the student who should contact the
lecturer about the matter.

Each assignment submission must have a cover sheet with the student’s name, student
number, and a declaration that the submission is the student’s own work.

Students should keep a copy of all assessment items that are submitted at least until unit
grades have been published at the end of semester.

Section 9 of the UC Assessment Policy
numerical equivalents. Some scaling of marks and academic judgement may be applied to
determine students' final grades - in this process no student will be disadvantaged.

The lecturer reserves the right to ask a student to attend extra oral defence to his/her
assignment. Should it happen, the mark for the assignment will be based on the oral
performance.

For final assessment in the subject, the result will be one of the following grades: HD, DI, CR,
P, or Fail. The total mark is calculated by the following formula:

Total marks = Assignment 1 marks + Assignment 2 marks + Examination marks

The grade for the subject is then determined according to the following algorithm, the highest
possible:

<table>
<thead>
<tr>
<th>Total marks</th>
<th>Examination marks</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;= 85</td>
<td>&gt;= 85%</td>
<td>HD</td>
</tr>
<tr>
<td>&gt;= 75</td>
<td>&gt;= 75%</td>
<td>DI</td>
</tr>
<tr>
<td>&gt;= 65</td>
<td>&gt;= 65%</td>
<td>CR</td>
</tr>
<tr>
<td>&gt;= 50</td>
<td>&gt;= 50%</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FAIL (NX, NS, NC or NN)</td>
</tr>
</tbody>
</table>
5d Supplementary assessment
Not available

5e Academic Integrity
Students have a responsibility to uphold University standards on ethical scholarship. Good scholarship involves building on the work of others and use of others’ work must be acknowledged with proper attribution made. Cheating, plagiarism, and falsification of data are dishonest practices which contravene academic values.

5f Text-matching software
Not in use

6: Student Responsibility

6a Workload
The amount of time you will need to spend on study in this unit will depend on a number of factors including your prior knowledge, learning skill level and learning style. Nevertheless, in planning your time commitments you should note that for a 3cp unit the total notional workload over the semester or term is assumed to be 150 hours. These hours include time spent in classes. The total workload for units of different credit point value should vary proportionally. For example, for a 6cp unit the total notional workload over a semester or term is assumed to be 300 hours.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Estimated hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance at lectures and tutes, 3 hours/week, 13 weeks</td>
<td>39</td>
</tr>
<tr>
<td>Weekly study commitment, 3 hours/week, 12 weeks (excluding Week 1)</td>
<td>36</td>
</tr>
<tr>
<td>Assignment 1</td>
<td>25</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>25</td>
</tr>
<tr>
<td>Exam preparation</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
</tr>
</tbody>
</table>

6b Special needs
Students who need assistance in undertaking the unit because of disability or other circumstances should inform their Unit Convener or UC AccessAbility (formerly the Disabilities Office) as soon as possible so the necessary arrangements can be made.

6c Participation requirements
There will be no roll calls; however, students are encouraged to make every attempt to attend all scheduled teaching activities. Failing to do so may result poor understanding and the failure of the unit.

6d Withdrawal
If you are planning to withdraw please discuss with your unit convener. Please see this link for further information on deadlines.

6e Required IT skills
Common IT skills, such as writing a report electronically, using web browsers, and using Moodle etc., are required. C#, Visual Studio, and SQL skills are highly desirable, but not
essential to enrol in this unit. **However, for these who do not have the skills, extra effort to catch up the missing skills is required, and the workload will exceed 150 hours.**

6f Costs

6g **Work Integrated Learning**

- **ICT PROBLEM SOLVING (PS)**
- **PROFESSIONAL KNOWLEDGE (PK)**
  - Ethics
  - Professionalism
  - Interpersonal communication
  - Societal issues/Legal issues/privacy
- **TECHNOLOGY RESOURCES (TR)**
  - Data and information management
  - Networking.
- **TECHNOLOGY BUILDING (TB)**
  - Programming
  - Human-computer interaction
  - Systems development

6h **Additional information**

7: **Student Feedback**

All students enrolled in this unit will have an opportunity to provide anonymous feedback on the unit at the end of the Semester via the Unit Satisfaction Survey (USS) which will be presented to you on OSIS. Your lecturer or tutor may also invite you to provide more detailed feedback on their teaching through an anonymous questionnaire.

8: **Authority of this Unit Outline**

Any change to the information contained in Section 2 (Academic content), and Section 5 (Assessment) of this document, will only be made by the Unit Convener if the written agreement of Head of Discipline and a majority of students has been obtained; and if written advice of the change is then provided on the unit site in the learning management system. If this is not possible, written advice of the change must be forwarded to each student enrolled in the unit at their registered term address. Any individual student who believes him/herself to be disadvantaged by a change is encouraged to discuss the matter with the Unit Convener.