Deakin College

SIT104
INTRODUCTION TO WEB DEVELOPMENT

TRIMESTER 1 2018

This unit guide is applicable for the year and teaching period specified above only

CONTENTS

A note from your Unit Co-ordinator

Welcome to **SIT104 Introduction to Web Development.** This unit outline explains the aims of the unit and describes the assessment requirements. You should always read this unit guide first and check it frequently when preparing to study, or embarking on assignment work.

Contact details

Unit Co-ordinator: Dr Gulisong Nasierding
Room: la4.111, Level 4 Building LA
Telephone: (03) 9244 5197
Email: gulisong.nasierding@deakin.edu.au

Lecturer: Dr Atul Sajjanhar
Room: la4.111, Level 4 Building LA
Telephone: (03) 9244 5197
Email: atul.sajjanhar@deakin.edu.au

Unit overview

Unit: SIT104
Unit title: Introduction to Web Development
Prerequisites: Nil
Teaching Method: Four hours of class contact per week are allocated to this unit.

Unit description

This unit introduces the techniques of creating static and dynamic web content using HTML, style sheets, client-side and server-side scripting languages and databases. It focuses on developing the skills required for web programming with mark-up and scripting languages, such as building quality web pages, designing and maintaining a website. It introduces the concepts and technologies of the Web, the Internet and data networks, addresses how to use basic web programming tools, and discusses the potential future of web/internet applications.

Learning objectives
On completion of this unit students should know how to design, develop and maintain Web pages and Web sites, and understand interaction between Web client (browser) and Web server for accessing various kinds of remote resources (e.g. a database).

Unit learning outcomes

These are the Learning Outcomes (ULO) for this Unit

ULO	At the completion of this unit students can:
ULO1	Describe the process of designing and developing static and dynamic web pages and websites.
ULO2	Develop a practical knowledge of a range of coding languages including, HTML, CSS, JavaScript, PHP and Oracle
ULO3	Apply the understanding of Web theory and various languages to develop static web pages and websites
ULO4	Apply the understanding of Web theory and various languages to develop dynamic web pages and websites using client side scripting
ULO5	Apply the understanding of Web theory and various languages to develop dynamic web pages and websites using server side scripting and databases

Deakin College Transitional Attributes

All Deakin College Diploma units contribute to the following graduate attributes:

- independent learner
- knowledge base
- research skills
- time management skills
- report writing skills
- awareness of ethics of tertiary education
- use of appropriate technologies
- ability to work alone and as part of a team

Unit learning resources

Essential learning resources

There is no prescribed textbook.

Recommended learning resources

Web Development and Design Foundations with XHTML: International Version, Fifth edition, by Terry Felke-Morris, Pearson Education, Inc.

Assessment

Assessment task	Weighting	Due date	Unit learning outcome(s)
1. Assignment 1	20%	Monday of Week 6	ULO1, 2, 3
2. Assignment 2	30%	Monday of Week 12	ULO1, 2, 4, 5
3. Final Examination	50%	Week 13	ULO1, 2, 3, 4, 5

Assessment Details:

- Summative assessment task 1

	Assignment 1 - Website development
Brief description of assessment task	This assessment task requires students to work individually, to create a website for a small business. Students should apply their understanding of how to use mark-up language to organize information and style the presentation.
Detail of student output	This is an individual assessment task. Students will need to demonstrate their ability to create a website by designing their own template. Students will be required to upload their Web pages to the Deakin Web server. A website URL will need to be submitted.
Grading and weighting (% total mark for unit)	20%, numerically marked.
This task assesses your achievement of these Unit Learning Outcome(s)	ULO1. Assessed through student ability to describe the process of designing and developing static web pages and websites ULO2. Assessed through student ability to develop a practical knowledge of a range of coding languages including, HTML and CSS ULO3 Assessed through student ability to apply the understanding of Web theory and various languages to develop static web pages and websites
How and when you will receive feedback on your work	Students are encouraged to seek feedback during designated activities in practical learning activities. Final feedback is provided within 2 weeks after your submission.
When and how to submit your work	Online submission via Deakin College Student Portal/Moodle by 10pm Monday of Week 6 (according to Deakin College Calendar).

- Summative assessment task 2

	Assignment 2: Dynamic Website Design
Brief description of assessment task	This assessment task requires students to work individually. Students will use JavaScript to implement client-side form validation for the website created in Website development - Assignment 1. Students will also use PHP and Oracle to implement server side scripting which involves a simple database design and database query for the website.

Detail of studentoutput	This is an individual assessment task. Students will need to demonstrate their ability to validate forms by using client side scripting language (e.g.JavaScript). Students will be required to upload their Web pages to the Deakin Web server. A website URL will need to be submitted. Students will also need to demonstrate their ability to query a database and generate dynamic contents using PHP and Oracle.
Grading and weighting (% total mark for unit)	30%, numerically marked.
This task assesses your achievement ofthese Unit Learning Outcome(s)	ULO1. Assessed through student ability to describe the process of designing and developing dynamic web pages and websites. ULO2. Assessed through student ability to develop a practical knowledge of a range of coding languages including JavaScript. ULO4 and ULO5. Apply the understanding of Web theory and various languages to develop dynamic web pages and websites using client side scripting, server side scripting and database.
How and when you will receive feedback on your work	Students are encouraged to seek feedback during designated activities inpractical activities.
When and how to submit your work	Online submission via Deakin College Student Portal /Moodle by 10 pm Monday of week 12 (according to Deakin College Calendar).

- **Summative assessment task 3**.

	Examination
Brief description of assessment task	This assessment task is a two-hour end of trimester written examination. It will consist of two parts and will assess the students' understanding of the trimester's work. Part one consists of multiple-choice questions, which will require the students to demonstrate their understanding of Web concepts. Part two consists of short answer questions, which requires the students to apply their understanding of Web concepts and problem solving skills.
Detail of studentoutput	Students will be required to complete the written examination under supervised conditions within a two-hour time frame.
Grading and weighting (% total mark for unit)	50%

This task assesses your achievement of these Unit Learning Outcome(s)	ULO1. Assessed through student ability to describe the process of designing and developing static and dynamic web pages and websites ULO2. Assessed through student ability to apply a range of coding languages including HTML, CSS, JavaScript, and PHP to solve problems ULO3 Assessed through student ability to apply the understanding of Web theory and various languages to solve web design problems ULO4. Apply the understanding of Web theory and various languages to solve problems using client side scripting ULO5. Apply the understanding of Web theory and various languages to solve server side scripting problems
How and when you will receive feedback on your work	Students will practice exam type questions in class throughout the trimester to prepare for the examination. Feedback will be provided to the class via worked solutions. In addition students will be encouraged to seek feedback during classes as required.
When and how to submit your work	Students will be required to attend a two hour supervised written examination during the end of trimester examination period. It is the responsibility of students to review their examination timetable when it is released via Deakin College Student Portal.

Determination of Final Grade

This unit does not have a hurdle requirement. Students must achieve at least 50% in the unit overall, to obtain a passing grade in the unit.

In-Trimester Assessments

It is the responsibility of a student to sit for a test/assessment on the scheduled date, according to the class they are enrolled in.

Assessment Reviews

Review of Assessment During a Trimester

During the course of a trimester, students will be provided with feedback on their performance in all assessment tasks. It is expected that students will discuss any issues directly with their lecturer.

Limited grounds for a review of assessment are available and students are referred to the *Review of Assessment Policy* for further information (available from the Deakin College website or the Student Portal under Students/Forms/Policies and Procedures). A *Review of Assessment Application Form* must be completed and submitted within 5 working days of publication of the result for the particular piece of assessment.

Review of Assessment at the End of a Trimester

If a student reasonably believes that a final grade has not been added or processed correctly, he or she may apply for a review of final grade by completing the *Review of Final Grade Application*. Applications must be submitted to Deakin College Reception within 5 working days of the publication of the final results.

A review of final grade involves review and checking of marks - it does NOT involve a review or remarking of individual pieces of assessment.

Special Consideration

Special Consideration may be provided to students who are prevented from performing to the best of their ability in a particular piece of assessment, including a scheduled examination, due to serious and exceptional circumstances beyond their control. Examples of such circumstances are provided in the *Special Consideration and Deferred Examinations Policy* (available from the Deakin College website or the Student Portal under Students/Forms/Policies and Procedures) and include serious illness or injury, hardship or trauma.

Students are required to complete a *Special Consideration Application* (available from the Student Portal under Students/Forms) and submit this to Deakin College Reception, together with supporting documentation before the assessment due date, or **within 3 working days** after the submission/timetabled date of the relevant piece of assessment. Page 3 ('Health Practitioner Certificate') of the *Special Consideration Application* must be completed by a health practitioner for applications on medical, health or psychological grounds. Please refer to the *Special Consideration and Deferred Examinations Policy* for further information.

Students who require an assignment extension should not apply for special consideration but must complete a *Request for Extension of Assignment Dues Date* form (available from the Student Portal under Students/Forms).

Academic Misconduct

Students should familiarise themselves with the ***Academic Integrity Policy*** (available from the Deakin College website or the Student Portal under Students/Forms/Policies and Procedures).

Academic misconduct is a serious offence in academia. These include plagiarism, collusion, cheating and 'misrepresentations' (which includes falsification of documents). Penalties will be applied consistently with the *Academic Integrity Policy*.

Plagiarism occurs when a student intentionally or accidentally presents the work of another person(s) as though it is their own original work without proper reference to that source or sources. For example, copying or paraphrasing an author's work without referencing that work, translating foreign works into English without acknowledging those sources, or reusing one's own previously submitted or assessed work.

Collusion occurs when work is produced by collaborating with other person(s), without permission, and then presenting that work as if it is your own. For example, copying any part of another student's assignment, allowing another student to copy any part of your assignment, or allowing another person to rewrite or make changes to your assignment.

Cheating occurs when a student engages in other forms of dishonest conduct, whether in an assessment or in any representation. For example, communication with another student during an examination, having unauthorised notes during an examination - the notes may be on or in an object, a data storage device or on any part of the body, or 'contract cheating', which is the purchasing work or commissioning another person or website to produce a work which is then passed off as your own.

Misrepresentation occurs when a student presents falsified documents, or by words, conduct or non-disclosure of information creates a false status or an impression inconsistent with facts, for example,

_____

This document is current at 06/04/2018. Once printed this document is no longer a controlled document.
L:\Academic – Unit Outlines\2018-01\Diploma\Computing\SIT104   V45-04/18   Page 8

falsely asserting attendance at a lecture or a laboratory session or submitting a falsified medical certificate.

Whenever you refer to another person's research or ideas (whether by directly quoting or by paraphrasing them) you MUST acknowledge that source. Copying paragraphs from the internet and presenting them as your own work is plagiarism. If you download and copy paragraphs from the internet, you must identify the source.

You **MUST acknowledge the sources** that you have drawn on. This is a necessary courtesy to the original authors, and also allows the readers of your work to follow up on any points that you have raised.

If you directly copy another writer's phrase, sentence or paragraph, then you should use quotation marks and note the source of the quote. If you use another writer's ideas, but not his or her exact words, you should again note the source. There are a number of ways by which you can refer to other people's work.

The main referencing method used at Deakin College is the Harvard referencing method, which involves noting the author's name, the title of the article and journal, or book, the year of publication, the journal's volume number, the book publisher's name and location, and the relevant page numbers.

A copy of *Guide to Assignment Writing and Referencing* is available on the Deakin University website: http://www.deakin.edu.au/students/study-support/referencing/harvard

Assignment submission

Assignments must be submitted by the due date. Students should complete the *Assignment Cover Sheet* (available from the Student Portal under Students / Forms), attach it to their assignment and then submit the completed assignment as outlined in the assignment details. (Assignments will not be accepted at Deakin College Reception).

Students must keep a copy of each assignment submitted and must be able to produce the copy in the unlikely event that the original assignment is misplaced. Students must maintain backup copies of all their assignment work. Electronic loss of data is common, but is **NOT** a satisfactory excuse for an extension of a submission date.

Late submission of assignments

Extension of an assignment submission date
If there is a compelling reason why you are unable to complete your assignment before the due date you should complete a *Request for Extension of Assignment Due Date* form, available from the Student Portal under Students / Forms and submit it to your lecturer. This must be done **at least 48 hours before** the assignment due date.

Penalties for late submissions
Assignments received late and without prior approval will be penalised. A penalty of 10% of the available marks will be deducted for **every day** the assignment is late. Assignments received after 7 days without an approved extension, will not be marked.

Learning support

Students have access to group-oriented and individual learning support at Deakin College. During each trimester, students can attend a series of study skills workshops conducted both at Deakin College and Deakin University on topics such as time management, avoiding plagiarism, referencing, academic writing, critical thinking and exam preparation.

Students can book individual consultations with the Deakin College Academic Skills Advisor. They can also access the Deakin University Language and Learning Drop-in Centre. All students have access to the Academic Skills Moodle site which contains a number of resources to improve students' study skills and language proficiency.

Grading system

All students enrolled in any unit will be graded according to Deakin College's standard grading system as follows:

GRADE	DESCRIPTION	PERCENTAGE
HD	High Distinction	80 - 100
D	Distinction	70 - 79
CR	Credit	60 - 69
P	Pass	50 - 59
N	Fail	0 – 49
DE	Deferred Examination	
EX	Exemption Granted	
RI	Results Not Finalised	
RPL	Recognition of Prior Learning	
RW	Results Withheld	
UP	Ungraded Pass (Safety Units)	
W	Withdrawn without academic penalty	
WN	Withdrawn Failure	
XN	Enrolled Assessment Incomplete	

Changes to Enrolment

Enrolment changes can be made through the student portal until 5.00 pm Friday of the second week of the trimester.

- Withdrawal from any unit or course before the end of week 4 of a trimester will not incur an academic penalty. Fees paid for the unit(s) will be credited to the following trimester. Fees will be forfeited for any withdrawal after week 4;
- Withdrawal from any unit or course between weeks 5 and 8 of a trimester will incur a grade of W (Withdrawn). This grade does not incur an academic penalty;
- Withdrawal from any unit or course between weeks 9 and 13 of a trimester will incur a grade of WF (Withdrawn Fail). This grade will incur an academic penalty and a student's course progress will be assessed at the end of the trimester by the Academic Progress and Discipline Committee (APDC);
- Overseas students are required to maintain a full time enrolment. Therefore, if a withdrawal from one or more units constitutes a part time enrolment, withdrawal from such units will not be permissible.

Class Attendance

Deakin College takes attendance seriously. Attendance is an important element of a student's success in their studies and it is strongly recommended that attendance is maintained in all classes. All work covered in class is examinable.

Attendance will be recorded in all sessions and students should make themselves aware of the *Attendance Policy* (available from the Deakin College website or the Student Portal under Students/Forms/Policies and Procedures).

Where alternative classes exist for a unit, students are permitted to attend a maximum of two alternative classes per unit during the trimester. Students should collect a *Lecturer Attendance Variation Form* from reception or from the Student Portal under Students/Forms and submit this to the lecturer of the alternate class to sign and verify their attendance. The signed and verified form must be submitted to Reception by the student within 7 days after the initial scheduled class.

Medical certificates are not required to be submitted to Deakin College to explain occasional absences from class or short-term illness. However, where 'compassionate and compelling' circumstances exist, for example, serious illness or injury, trauma, or bereavement of close family members, an *Explained Absence Form* can be submitted to Deakin College Reception with your evidence within 7 days of the absence so that attendance records can be adjusted to show that compelling or compassionate circumstances occurred. This does not change an 'absence' to an 'attendance' – it merely indicates that compelling or compassionate circumstances occurred which explain a student's absence. Please refer to the *Attendance Policy* for more information.

Student evaluation of this unit

At the end of trimester students will be asked to evaluate all of the units they have studied during the trimester. Students are strongly encouraged to complete the Student Evaluation form for this unit and give feedback.

All ratings and comments are read and given careful consideration following completion of each trimester and inform the changes which may be introduced in subsequent trimesters.

Trimester 1 2018 Timetable

WEEK	Week Commencing	LECTURES	PRACTICAL SESSION
1	Monday 5 March 2018	Introduction to the Unit; Web Development, HTML and Mark-up	Making and viewing basic HTML pages by using basic HTML tags.
2	Monday 12 March 2018	Text Structures and Formatting	Using more HTML tags, including ordered list, unordered list and definition list (Glossary Lists), and link tags.
3	Monday 19 March 2018	Images and Tables	Using the relevant HTML tags to insert images, tables to a web page
4a	Monday 26 March – Wednesday 28 March 2018	HTML Forms	Design and add forms to a web page.
Trimester Break: Thursday 29 March – Wednesday 4 April 2018			
4b	Thursday 5 April – Friday 6 April 2018	HTML Forms	
5	Monday 9 April 2018	Website Design	Overview and apply web design rules to a web page.
6	Monday 16 April 2018	Cascading Style Sheets	Design and apply internal and external CSS **Assignment 1 due:** 10 pm Monday, Week 6
7	Monday 23 April 2018	Client-side Scripting; JavaScript	Practicing with client-side java scripting
8	Monday 30 April 2018	Implementing Scripting	Implementing the Scripting and form validations
9	Monday 7 May 2018	Server-side Technologies; PHP	Forms and PHP
10	Monday 14 May 2018	PHP and Database	PHP and Database interaction practice
11	Monday 21 May 2018	HTML, PHP and Database Interaction	HTML, PHP and Database Interaction practice
12	Monday 28 May 2018	Revision	**Assignment 2 due:** 10 pm Monday, Week12
Examination Week Monday 4 June to Friday 8 June 2018			

Trimester 1 Census Date: Wednesday 28 March 2018

Results released on portal: Tuesday 19 June 2018

Portal opens for T2 re-enrolment: Saturday 23 June 2018

Appendix A: Exam Requirements and Instructions

SUMMARY OF EXAM REQUIREMENTS FOR STUDENTS

1. You should arrive for your exam <u>at least 15 minutes</u> before it is scheduled to commence.

2. You will not be permitted to sit the exam if you are more than 30 minutes late after writing time commences.

3. You MUST have your Deakin College student ID card with you for every exam you sit. You will not be permitted to enter the exam room without it.

4. No electronic equipment whatsoever, with the possible exception of a non-programmable calculator, may be used in an exam.

5. Personal items (purse, wallet, mobile phone) may be brought into the exam and should be left underneath your desk. Do NOT leave valuables in bags at the end of the exam room. Mobile phones MUST be switched off. Any mobile phone which rings during an exam will be confiscated and not returned until the exam papers have been collected and placed into storage

6. Find out before end of the trimester whether your exam is 'Open Book' or 'Closed Book'.

7. Find out before the end of the trimester whether or not you can bring a calculator or a printed dictionary into the exam.

8. The penalties for misbehaving or having unauthorised material (cheating) in an exam are severe. Make sure you know before hand what materials you can take into your exams. Any extraneous written material must be handed in before the exam commences. Students found with unauthorised material in their possession during an exam may have their paper <u>cancelled</u>.

9. Students who are ill during an exam may apply for special consideration using the form found on the student portal. An application for special consideration MUST be accompanied by supporting documentation and submitted within 2 working days of the exam.

10. Students who are prevented from sitting an exam (e.g. a car accident) may apply for a deferred exam using the special consideration form found on the student portal. An application for a deferred exam MUST be accompanied by supporting documentation and submitted within 2 working days of the exam.

Students are advised to read all the exam regulations accessible on the student portal at
http://learning.deakincollege.edu.au/forms (under policies and procedures).

SIT104 INSTRUCTIONS TO CANDIDATES

This examination consists of **two** sections.

Section One: This section consists of 40 multiple choice questions, each worth one (1) mark. Write your answers to the questions on the multiple choice answer sheet. You should spend approximately 40 minutes on this section (that is, approximately 1 minute per question).

Section Two: This section consists of up to ten (10) short answer questions, total mark for this section worth 60 marks. Write your answers to the questions in the space provided in this booklet. You should spend approximately 1 hour and 20 minutes, on this section (that is, approximately 8 minutes per question).

There are a total of 100 marks allocated for the exam paper; the examination is worth 50% of the unit's total assessment.

This is a **closed book** examination.

No textbooks, lecture notes, dictionaries, calculators, etc are allowed to be taken into the examination room. Extraneous written material must be handed in before the exam commences. Any student found with unauthorised material will have their exam cancelled.

**THIS EXAMINATION PAPER MUST NOT BE REMOVED
FROM THE EXAMINATION ROOM**