Course Code:	1621ICT
Course Name:	Web Design & Development
Semester:	Trimester 2, 2019
Program:	Diploma of Information Technology
Credit Points:	10
Course Coordinator:	Dr Rob Baltrusch
Document modified:	24 June 2019

Teaching Team

Your lecturer/tutor can be contacted via the email system on the portal.

Name	Email
Dr Rob Baltrusch	rob.baltrusch@staff.griffithcollege.edu.au

Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times and rooms will be published on the Griffith College Portal under the "myTimetable" link.

Prerequisites

This course is not a prerequisite for any other Diploma courses.

Brief Course Description

This course builds an understanding of interactive technology applications, and production considerations. The course adopts a particular emphasis on the World Wide Web (including HTML, CSS, JavaScript, and PHP) and provides the tools, both practical and conceptual, with which to produce and evaluate Web-based multimedia works.

Rationale

IT applications are increasingly web-based. Web technology has grown to include a variety of business, academic, organisational and social applications. Diverse multi-cultural and multi-lingual user communities now depend on Web technology. This course covers the design, implementation, and testing of web-based applications including related client and server-side software, interfaces, and digital media.

Aims

The World Wide Web has become a major platform for the delivery of interactive multimedia products. For successful participation of graduates in the Information Technology and Multimedia industries, the development of practical and conceptual knowledge related to interactive multimedia on the World Wide Web is essential.
The knowledge and skills developed in this course relate specifically to the World Wide Web, and aims to equip students with both practical knowledge of tools (HTML 5, CSS 3) and conceptual knowledge required to design, produce and evaluate Web-based works.

Learning Outcomes

After successfully completing this course you should be able to:

1. WEB TECHNOLOGIES
1.1 Understand the structure of the World Wide Web as interconnected hypertext documents and the importance of the HTTP protocol in Web applications and understand Web standards and standards bodies including the World Wide Web Consortium (W3C)
1.2 Create and validate HTML documents and use presentation technologies, such as Cascading Style Sheets
1.3 Understand the characteristics that enhance usability of a web site and explain why

accessibility issues are an important consideration in web page development

1.4 Understand issues relating to client-side and server-side security

2. INFORMATION DESIGN AND IMPLEMENTATION

2.1 Build a simple web site that organizes information effectively

2.2 Understand the importance of interfacing web sites to underlying databases

2.3 Compare/contrast graphic media file format characteristics such as color depth, compression, and codec.

2.4 Generate dynamic server-side content using a templating language such as PHP.

3. SEARCH ENGINE OPTIMISATION

3.1 Understand ways to increase search engine visibility of a website

3.2 Implement SEO techniques such as microdata

Texts and Supporting Materials

Required Resources:

Vodnik, Sasha (2016) HTML 5 and CSS3 - Illustrated Complete, Second Edition. Course Technology.

Other Resources:

- griffith.tech
- w3schools.com
- codecademy.com

Organisation and Teaching Strategies

This course is composed of lectures, tutorials and workshops. Lectures will provide you with theoretical concepts that are implemented and explored and extended in tutorials and workshops. Tutorials will focus more on reinforcing theoretical concepts, and workshops will focus on practical skills. The course is supplemented by web materials available from the Griffith College portal.

Class Contact Summary

Attendance

Your attendance in class will be marked twice during a four hour class. To receive full attendance, you must be present in the classroom on both occasions. Therefore, you are encouraged to attend and participate in all classes throughout the semester.

Participation in Class

You are expected to actively participate in classes each week.

Consultant Times

Attendance during consultation times is optional but you are encouraged to use this extra help to improve your learning outcomes.

Course Materials

Lecture notes will be made available to you on the Learning@Griffith College site on the student portal and you are advised to print these out and bring them to each class so that extra notes can be added.

Independent Learning

You are expected to reinforce your learning from class time by undertaking sufficient independent study {approximately 6 hours per week outside of class time} so that you can achieve the learning outcomes of the course.

Program Progression

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80% and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - Program progression Policy - for more information].

Content Schedule

Weekly Teaching Schedule

Week	Topic	Activity	Readings
1	**Introduction (Lecture):** Introduction to the course. Getting started with HTML	Lecture	Vodnik, S. (Unit A, B);

		Preparation for Website development **Readings/Ref:** codeacademy ; html5css3		
		HTML basics	Workshop	
2		**Links and Images (Lecture):** Absolute and relative URLs. Anchor tags. Image types.	Lecture	Vodnik, S. (Unit C);
		CSS basics	Tutorial	
		CSS basics	Workshop	
3		**CSS (Lecture):** Inline, embedded, and external CSS. Styling text, colours, borders, and backgrounds.	Lecture	Vodnik, S. (Unit D);
		CSS layout	Tutorial	
		CSS formatting	Workshop	
4		**Lists and Tables (Lecture):** Ordered and unordered lists. Tables, headers, and rows.	Lecture	Vodnik, S. (Unit E);
		CSS formatting	Tutorial	
		CSS formatting	Workshop	
5		**Advanced CSS Styling (Lecture):**	Lecture	Vodnik, S. (Unit F);
		Using Links	Tutorial	
		Using Links	Workshop	
6		**Page layout with CSS (Lecture):** Page layout using FlexBox. Responsive web design. CSS Frameworks.	Lecture	Vodnik, S. (Unit G);
		Using images	Tutorial	
		Using images	Workshop	
7		**Introduction to PHP (Lecture):** PHP as a templating language, variables.	Lecture	Vodnik, S. (Unit H);
		Lists	Tutorial	
		Tables	Workshop	
8		**Processing Form Data (Lecture):** Form action methods. URL parameters. Processing and responding to form actions.	Lecture	Vodnik, S. (Unit I, J);

	Advanced CSS and forms	Tutorial	
	Advanced CSS and forms	Workshop	
9	**Arrays and Loops (Lecture):** Generating dynamic content using arrays and loops.	Lecture	Vodnik, S. (Unit K);
	Audio & video	Tutorial	
	Audio & video	Workshop	
10	**Working with Databases (Lecture):** How databases are used in websites. Basic SQL syntax.	Lecture	Vodnik, S. (Unit L);
	Basic Javascript	Tutorial	
	Basic Javascript	Workshop	
11	**Search Engine Optimisation (Lecture):** Optimising websites for search engines. Microdata.	Lecture	Vodnik, S. (Unit N);
	Search engine optimisation	Tutorial	
	Search engine optimisation	Workshop	
12	**Client-side Scripting (Lecture)**: Client-side scripting languages with javascript examples Course Review	Lecture	
	Exam preparation	Tutorial	

Assessment

This section sets out the assessment requirements for this course.

Summary of Assessment

Item	Assessment Task	Weighting	Relevant Learning Outcomes	Due Date

1	Workshop 1	5%	1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2	3
2	Workshop 2	5%	1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2	5
3	Workshop 3	5%	1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2	7
4	Workshop 4	5%	1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2	10
6	quiz 1	5%	1.1, 1.2, 1.3	6
7	quiz 2	5%	1.1, 1.2, 1.4, 2.2, 2.4	9
8	Project: Website Planning Document	10%	1.3, 2.2, 3.1	6
9	Project: Web site implementation	20%	1.2, 2.1, 2.4	10
10	Final Examination	40%	1.1, 1.2, 1.3, 1.4, 2.2, 2.3, 3.1	Exam Week

Assessment Details

Quizzes:
The quizzes will test your understanding of key topics delivered in the lectures. There are 2 (two) quizzes in total each worth 5%.

Workshops:
Workshop cases will provide students with small, staged submission of work to enable both students' and instructors to track progress in the semester. The workshop cases will focus on the technical skills developed in workshop sessions and will address some of the design issues discussed in lectures. Workshop cases are individual assessment items due in weeks 3, 5, 7, and 10, and are worth 5% each.

Website Design and Development Project:

The Website design and development project is an individual assessment item aimed at integrating the concepts related to design covered in lectures and the technical skills developed in tutorials. In this project, you will need to produce the design for a website for a fictitious client. Your client could be a small local business, a government agency, a volunteer organisation or any other entity that needs an online presence. Use of an existing real business or organisation is not appropriate for this assignment. The aim of the website is to facilitate your clients online needs which you should describe in your design document.

Final Examination:

The examination is an individual, closed book exam and will focus on both conceptual knowledge of design and on knowledge of syntax of HTML5, CSS3, and JavaScript.

Specific assessment details (specifications in full and marking criteria) will be provided in class at the start of the semester.

Submission and Return of Assessment Items

Please note: You may be required to submit assignments electronically to a collusion detection tool to allow the detection of possible instances of collusion/plagiarism. This will also involve Griffith College or its nominee storing your work on a secure database for use in testing assessment submitted by others in the future. For further information on Griffith Colleges Academic Misconduct Policy refer to Griffith Colleges online Policy Library.

Normally you will be able to collect your assignments in class within fourteen [14] days of the due date for submission of the assignment.

Retention of Originals

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

Extensions

To apply for an extension of time for an assignment, you must submit an Application for Extension of Assignment form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. Griffith College Medical Certificate]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

Assessment Feedback

Marks awarded for assessment items will also be available on the on-line grades system on the Student Website within fourteen [14] days of the due date. You may arrange an appointment during the designated consultation time to discuss assessment in more detail.

Generic Skills

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills	Taught	Practised	Assessed
Written Communication	Yes	Yes	Yes
Oral Communication		Yes	
Information Literacy	Yes	Yes	Yes
Secondary Research		Yes	Yes
Critical and Innovative Thinking	Yes	Yes	Yes
Academic Integrity		Yes	Yes
Self Directed Learning		Yes	
Team Work	Yes	Yes	Yes
Cultural Intelligence		Yes	
English Language Proficiency		Yes	

Additional Course Generic Skills

Specific Skills	Taught	Practised	Assessed
Responsible Effective Citizenship		Yes	

Additional Course Information

All course material is available on the course website located at griffith.tech

Teacher and Course Evaluations

Students enjoy gaining valuable skills and knowledge in designing and building dynamic, interactive and intuitive web interfaces on a weekly basis. In response to student suggestions to provide \"internet [access] with high speed bandwidth and better access to learning resources, Griffith College has upgraded its internet access and is now faster and available across the entire Griffith University campus. Regarding student suggestions that \"this course could be improved if the workload was spread evenly across the semester\", we have arranged the schedule so that the weekly workload is more consistent and that difficult topics are given adequate attention.

Your feedback is respected and valued by your lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations via Griffith College's online evaluation tool whenever these are available.

Academic Integrity

Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, pre-meditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of any allegation of academic misconduct made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student

Counsellor.

Please ensure that you are familiar with the [Griffith College Academic Integrity Policy](#); this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Academic Integrity Policy on the Griffith College website – Policy Library.

Risk Assessment Statement

There are no out of the ordinary risks associated with this course.