

Maths, IT and Science Academy

Unit Outline

Year: 11/12

Timetable Period: Semester 1 2021

Course Title	Information Technology	Course Code:	1561/1562
Semester Unit	Unit 1: Digital Application	Unit Value/Code:	1.0 / 15817/15832
Term Unit 1	Unit 1a: Digital Application a	Unit Value/Code:	0.5 / 15818/15833
Term Unit 2	Unit 1b: Digital Application b	Unit Value/Code:	0.5 / 15819/15834
Teacher/s	Iwen Chow	Google Classroom Code and Line	Oyybmq3 Line 3
Executive Teachers	Andraya Stapp-Gaunt & Jane Watson		

Unit Description

The focus of this unit is on managing and understanding the complexity of a data-driven system by examining the individual components involved in its operation and the interconnectedness of those components.

Students develop the skills and knowledge required to analyse and examine existing applications. Applications could be as simple as a static website or as complex as a distributed learning and management platform.

They design and build their own applications to further their understanding of the interconnected nature of various digital assets.

Specific Unit Goals

This unit should enable students to:

A Course	T Course
<ul style="list-style-type: none"> analyse the components of systems, and their interconnectedness in order to rebuild, redesign and create applications 	<ul style="list-style-type: none"> critically analyse the components of systems, and their interconnectedness in

<ul style="list-style-type: none"> • develop computational thinking skills and strategies to identify, deconstruct, and solve problems 	<p>order to rebuild, redesign and create applications</p> <ul style="list-style-type: none"> • develop and extend computational thinking skills and strategies to identify, deconstruct, and solve problems
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Content Description

A Course	T Course
<ul style="list-style-type: none"> • analyse the application of a design process used in the construction of an existing system for example, a simple game or a website • analyse and apply a design process, explaining opportunities and constraints that impact decision making when developing interconnected digital applications • understand and apply the elements and principles of the creation of digital applications, for example an object-oriented system, a website, or a simple game • understand and apply a design process to develop the architecture of interconnected digital applications, for example, a class diagram, a use case diagram for a website, a game design document 	<ul style="list-style-type: none"> • critically analyse and evaluate the application of a design process used in the construction of an existing system, for example, a simple game or a website • critically analyse and apply a design process, evaluating opportunities and constraints, and explain the decision making, when developing interconnected digital applications • critically analyse and apply the elements and principles of the creation of digital applications, for example an object-oriented system, a website, or a simple game • apply a design process to evaluate and develop the architecture of interconnected digital applications, for example, a class diagram, a use case diagram for a website, a game design document

Theories, Concepts and Materials

A Course	T Course
<ul style="list-style-type: none"> • analyse the theories affecting the design and development of a digital application, for example, programming paradigms, client and server architecture for websites, effective management of user interaction • analyse and apply computer science concepts for problem solving in the development of digital applications • analyse the factors affecting the development of a digital application within the context of its design environment • analyse legal, social and ethical responsibilities associated with the development of digital applications 	<ul style="list-style-type: none"> • critically analyse the theories affecting the design and development of a digital application, for example, programming paradigms, client and server architecture for websites, effective management of user interaction • critically analyse and apply computer science concepts for problem solving in the development of digital applications • critically analyse the factors affecting the development of a digital application within the context of its design environment • critically analyse legal, social and ethical responsibilities associated with the development of digital applications

Assessment

Task	Due Date	Weighting
Practical Assessment	Week 7	30%
Written Assessment	Week 9	20%
Practical Assessment	Week 14	30%
Written Assessment	Week 16	20%

BSSS Policies

SPECIFIC ENTRY & EXIT REQUIREMENTS FOR TERM UNITS:

This is a Semester Unit, students wishing to enter or exit after the end of term must have the change approved by the Academy Executive Leader and need to complete 50% of the assessment

ASSESSMENT CRITERIA FOR ASSESSMENT AND REPORTING OF STUDENT ACHIEVEMENT

Students will be assessed on the degree to which they demonstrate:

- an ability to respond critically to texts and logically justify viewpoint
- an ability to evaluate and synthesise material to make meaning
- imagination and originality
- competent and effective use of language for a range of purposes and audiences
- control of appropriate medium.

Attendance and Participation

It is expected that students will attend and participate in all scheduled classes/contact time/structured learning activities for the units in which they are enrolled, unless there is due cause and adequate documentary evidence is provided. Any student whose attendance falls below 90% of the scheduled classes/contact time or 90% participation in structured learning activities in a unit, without having due cause with adequate documentary evidence will be deemed to have voided the unit. However, the principal has the right to exercise discretion in special circumstances if satisfactory documentation is supplied.

Completion of Assessment Items

Students are expected to substantially complete and submit all assessment items. Exemption from an item and/or alternative assessment without penalty is available to students providing adequate documentary evidence. In order to meet the minimum assessment requirements of a unit, a student must substantially complete and submit at least 70% of the total assessment. However, the principal has the right to exercise discretion in the award of a grade or score in special circumstances where satisfactory documentation is supplied.

Late Submission of Assessment Items

4.3.10 Late Submission of Assessment Tasks (Non-Test Tasks) Students are encouraged to submit work on time as this is a valuable organisational skill and a key tenet of assessment condition standardisation. Students are also encouraged to complete work, even if it is late, as soon as possible after the due date. The following policy is to ensure equity for all students:

- All assessment tasks are expected to be submitted by the specified due time and date. Unless otherwise stipulated, the due time is 4.00pm for the physical submission of assessment and 11:59pm for the digital submission of assessment, on the due date.
- Unless there are exceptional circumstances, students must apply for an extension to the specified due date in advance, providing due cause and adequate documentary evidence for late submission.
- Where marks are awarded for assessment tasks, a late penalty will apply unless an extension is granted. The penalty for late submission is 5% of possible marks per calendar day late, including weekends and public holidays, until a penalty of 35% or the notional zero is reached. If an item is more than 7 days late, it receives the notional zero score (Refer to 4.3.11 Notional Zeros). Submission on weekends or public holidays may not be acceptable if a physical submission is required. This should be clearly stipulated to students.
- Where marks are not awarded, and a grade only is given for an assessment task, teachers will take into account the extent to which students have demonstrated their ability to complete and submit the task by the due date (taking into account any extensions granted) in awarding the grade.
- It may not be possible to grade or score work submitted late after marked work in a unit has been returned to other students. Work not submitted by the time marked work is returned to other students may be declared as 'Not submitted'. Students should be made aware in writing if this will be less than 7 days after the due date and any granted extensions. The policy is to be stated on assessment tasks and drawn to the attention of students.

Notional Zeros

Where students fail to hand in assessment items for which marks are awarded, they will be awarded a notional zero for that assessment item. The notional zero will be a score, which lies between 0.1 of a standard deviation below the lowest genuine score for that item and zero. Note: if the lowest genuine score is zero, the notional zero is zero.

Cheating and Dishonest Practice

The integrity of the College's assessment system relies upon all involved acting in accordance with the highest standards of honesty and fairness. Plagiarism is the copying, paraphrasing or summarising of work, in any form, without acknowledgement of sources, and presenting this as a student's own work. Examples of plagiarism could include, but are not limited to:

- submitting all or part of another person's work with/without that person's knowledge
- submitting all or part of a paper from a source text without proper acknowledgement
- copying part of another person's work from a source text, supplying proper documentation, but leaving out quotation marks
- submitting materials which paraphrase or summarise another person's work or ideas without appropriate documentation
- submitting a digital image, sound, design, photograph or animation, altered or unaltered, without proper acknowledgement of the source.

Right to Appeal

The ACT system operates a hierarchy of reviews and appeals:

- Student seeks review from teacher regarding assessment task mark/grade, unit score, unit grade, course score
- Student seeks review from head of department, if required following review by teacher
- Student appeals to her/his college principal for a review of college assessment relating to assessment task grade/mark, unit grade, unit score, course score, penalty imposed for breach of discipline in relation to assessment
- Student, who has been through the college appeal process, may appeal to the Board against the college procedures by which the appeal decision was reached.

Further information on relevant BSSS policies can be found here:

http://www.bsss.act.edu.au/data/assets/pdf_file/0004/479803/P_and_P_Manual_2021_v3.pdf

Unit Schedule Semester 1 2021: 11 T English Unit 1 – Communication of Meaning

Week	Dates	Content	General Info	Assessment	Weight	T E R M
1	1/2	Introduction to website design				1
2	8/2	Html – links, images, font, audio, video, tables, list, iframe, heading, format, attribute, form, breaks, paragraph				
3	15/2					
4	22/2					
5	1/3		Introduction to CSS – inline, floating, colour, layers, layout, external CSS	Moderation Day 2/3		
6	8/3	Canberra Day 8/3				
7	15/3	Website Design – usability, target audience			Practical assignment	
8	23/3					
9	29/3		Good Friday 2/4	Written Assignment	20%	
Holidays 5 April – 18 April						
10	19/4	Java Script, photoshop website design, dropdown menu				T E R M 2
11	26/4		26/4 Anzac Day Holiday			
12	3/5					
13	10/5					

14	17/5	Theory – website design, the history of Internet		Practical assignment	30%
15	24/5				
16	31/5		31/5 Reconciliation tion Day	Written assessment	20%
17	7/6		Exam Week		
18	14/6		14/6 Queen's Birthday		
19	21/6				
End of Term 2					