

## 2.4 Assessment Summary

The assessment items in this unit are designed to enable you to demonstrate that you have achieved the unit learning outcomes. Completion and submission of all assessment items which have been designated as mandatory or compulsory is essential to receive a passing grade.

### To pass this unit you must:

- Attempt all assessment tasks
- Score a minimum of 50% of weighted score

Item	Weight	Due Date	ULO's Assessed	Threshold
Online Quizzes	20%	Weeks 4, 7, 10, 12 and 13	1, 2, 3, 4	No
Computer Test	40%	Week 14	2, 3, 4	No
Assignment	40%	Week 13	2, 3, 4, 5, 6	No

### Feedback on Assessment

Feedback is an important part of the learning process that can improve your progress towards achieving the learning outcomes. Feedback is any written or spoken response made in relation to academic work such as an assessment task, a performance or product. It can be given to you by a teacher, an external assessor or student peer, and may be given individually or to a group of students. As a Western Sydney University student, it is your responsibility to seek out and act on feedback that is provided to you as a resource to further your learning.

In this unit you can expect verbal and written feedback within 2 weeks of any assessment submission. Further informal feedback will also be provided in lectures and/or tutorial sessions.

## 2.5 Assessment Details

### 2.5.1 Online Quizzes

<b>Weight:</b>	20%
<b>Type of Collaboration:</b>	Individual
<b>Due:</b>	Weeks 4, 7, 10, 12 and 13
<b>Submission:</b>	Online
<b>Format:</b>	30 minute online through vUWS. The quiz will be open for approximately one week.
<b>Length:</b>	5x 30 min
<b>Curriculum Mode:</b>	Quiz

The quiz will be based on the material covered in lectures and practicals. It may consist of multiple choice or short answer or numeric questions. Some questions may require the use of software to compute a solution.

#### Marking Criteria:

Criteria	High Distinction	Distinction	Credit	Pass	Unsatisfactory
mark	at least 85%	at least 75%	at least 65%	at least 50%	Less than 50%

### 2.5.2 Computer Test

<b>Weight:</b>	40%
<b>Type of Collaboration:</b>	Individual
<b>Due:</b>	Week 14
<b>Submission:</b>	In the lab
<b>Format:</b>	1 hour exam using computer software in the lab
<b>Length:</b>	Lab based 1 hour practical
<b>Curriculum Mode:</b>	Practical

The exam will consist of practical based questions using computer software and data sets.

#### Marking Criteria:

Criteria	High Distinction	Distinction	Credit	Pass	Unsatisfactory
mark	at least 85%	at least 75%	at least 65%	at least 50%	Less than 50%

### 2.5.3 Assignment

<b>Weight:</b>	40%
<b>Type of Collaboration:</b>	Individual
<b>Due:</b>	Week 13
<b>Submission:</b>	Online
<b>Format:</b>	Written report with results
<b>Length:</b>	3 weeks/approx. 2000 words
<b>Curriculum Mode:</b>	Practical

The Assignment will consist of a practical based activities and a written report, using techniques learnt in the first half of semester.

#### Marking Criteria:

Criteria	High Distinction	Distinction	Credit	Pass	Unsatisfactory
mark	at least 85%	at least 75%	at least 65%	at least 50%	Less than 50%

### 3 Teaching and Learning Activities

Weeks	Topic	Lecture	Prac/Lab	Assessments Due
Week 1 04-03-2019	Data handling for data science	Introduction to data science  Manipulate data in Excel  Introduction to R and RStudio		
Week 2 11-03-2019	The basics of R and data structure in R	Basic data structures  Working environment History, workspace Saving scripts	R environment and basic data handling	
Week 3 18-03-2019	Data types	Vectors, matrices and arrays, lists, factors, tables, data frames, expressions	Dealing with different data types	
Week 4 25-03-2019	Data manipulation	Data handling	Getting data ready for analysis	- Online Quizzes
Week 5 01-04-2019	R programming 1	Flow control statements	Writing R scripts	
Week 6 08-04-2019	R programming 2	Functions  Debugging using RStudio	Writing R functions	
Week 7 15-04-2019	Simulation using R	Basic data generating functions  Math and stats functions	Using R builtin functions for simulation	- Online Quizzes
Week 8 22-04-2019				
Week 9 29-04-2019	Input & outputs	Standard input/output	Reading and writing data from and to files	
Week 10 06-05-2019	Graphics	R plotting functions	Visualising data using R plotting functions	- Online Quizzes
Week 11 13-05-2019	Accessing data using SQL	Basic database system, SQL	Accessing data from database systems	

Weeks	Topic	Lecture	Prac/Lab	Assessments Due
		Connecting to database systems in R using SQL		
Week 12 20-05-2019	Documenting with RMarkdown	RStudio reproducible reporting system	Reporting using rmarkdown	- Online Quizzes
Week 13 27-05-2019	Advanced topics	R extension  Interfacing with other languages	Extending R functionalities	- Online Quizzes - Assignment
Week 14 03-06-2019				- Computer Test
Week 15 10-06-2019				
Week 16 17-06-2019				
Week 17 24-06-2019				

The above timetable should be used as a guide only, as it is subject to change. Students will be advised of any changes as they become known on the unit's vUWS site.