1. General Course Information

1.1 Course Details

Course Code:	**FND115**
Course Name:	**General Mathematics A**
Trimester:	**Trimester 1, 2022**
Program:	**Foundation Program**
Credit Points:	**10**
Course Coordinator:	**Gretel Heber**
Document modified:	**14 February 2022**

Course Description

This course is designed for students who require a general mathematics background suitable for studies in business, health sciences, IT and engineering. It includes basic arithmetic, algebra, functions and their graphs, logarithms, growth and decay, finance, statistics, and trigonometry.

Assumed Knowledge

There are no prerequisites for this course.

1.2 Teaching Team

Your teacher/s can be contacted via email as below:

You will also find their email in the Teacher's tile on your Course Site.

Name	Email
Gretel Heber	Gretel.heber@staff.griffithcollege.edu.au

1.3 Meet with your teacher

Your teacher is available each week to meet outside of normal class times. This is called consultation. Times that your teacher will be available for consultation will be found on the Teacher's tile on your Course Site.

1.4 Timetable

Your timetable is available on the Griffith College Digital Campus at My Apps, Timetable. This class is split into 2 x 2 hour classes per week. You must attend both classes per week.

1.5 Technical Specifications

All students must have access to a computer or suitable mobile device such as desktop, laptop, or tablet. In addition, up-to-date bowser access, a reliable high-speed internet connection with enough upload and download capacity, a webcam and headset including microphone are needed.

Microsoft Excel will be needed for Week 11.

2. Aims, Outcomes & Generic Skills

2.1 Course Aims

This course aims to equip students with an increased knowledge and understanding of essential mathematics suitable for future studies in business, health sciences, IT and engineering.

2.2 Learning Outcomes

After successfully completing this course you should be able to:

1. Perform a range of basic arithmetic and algebraic techniques
2. Recognize and solve Linear and Quadratic functions using appropriate methods, including graphing.
3. Solve both visual and written trigonometry problems
4. Logically solve logarithmic and index/indices applications
5. Use critical thinking to solve financial and/or statistical related questions
6. Combine knowledge of mathematical processes to initiate problem solving

2.3 Generic Skills and Capabilities

For further details on the Generic Skills please refer to the Graduate Generic Skills and Capabilities policy.

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 and Capabilities		Taught	Practised	Assessed
Acquisition of discipline knowledge and skills with critical judgement		✓	✓	✓
Communication and collaboration			✓	
Self-directed and active learning			✓	
Creative and future thinking			✓	✓
Social responsibility and ethical awareness				
Cultural competence and awareness in a culturally diverse environment				

3. Learning Resources

3.1 Required Learning Resources

Non-programmable scientific calculator.

Access to Microsoft Excel for Introduction to Statistics Module.

There is no prescribed text for this course, all notes and exercises are provided on the course site.

3.2 Recommended Learning Resources

n/a

3.3 College Support Services and Learning Resources

Griffith College provides many facilities and support services to assist students in their studies. Links to information about support resources that are available to students are included below for easy reference.

- Digital Library – Databases to which Griffith College students have access to through the Griffith Library Databases.
- Study Toolbox – there is a dedicated website for this course on the Griffith College Digital Campus.
- Academic Integrity - Griffith College is committed to ensuring academic integrity is understood and maintained by all staff and students. All students learn about academic integrity through engagement with Academic Integrity online modules within the Academic and Professional Studies course.
- Services and Support provides a range of services to support students throughout their studies including academic advice and assignment help from Student Learning Advisors, and personal and welfare support from Student Counsellors.
- Jobs and Employment in the Student Hub can assist students with career direction, resume and interview preparation, job search tips, and more.
- IT Support provides details of accessing support, information on s numbers and internet access and computer lab rules.

3.4 Other Information about your Learning

As you progress from the Foundation program to Diploma studies with Griffith College you will note some changes to the terminology used about your learning. This includes **Before Class** = Learning Content; **Classwork** = Learning Experiences; **Homework** = Leaning Activities and **Assessment** = Evidence of Learning. We have therefore included both in the below information.

Preparation and Participation in Learning

You need to prepare before attending your scheduled learning experience. Work through the **Before Class** (Learning Content) prepared by your teacher which is found on the course site. Make sure you complete the **Homework** (Learning Activities) set each week, they are designed to support your learning. Active participation in your learning will enhance your success. Ask questions when something is unclear or when you want to bring some issue to your teacher's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

Attendance

You are expected to actively engage in all **Classwork** (Learning Experiences) which underpin the learnings in this course. You are expected to engage with the Before Class work and Homework outside of timetabled class times. This requires you to be an active agent of your learning. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you are encouraged to BYOD (bring your own device) to class such as a laptop or tablet. This is not a requirement as computer lab facilities are available on campus, however, the use of such devices in the classroom is encouraged with appropriate and considerate use principles being a priority.

Consultation Sessions

Teachers offer extra time each week to assist students outside the classroom. This is known as 'consultation time.' You may seek assistance from your teacher on email or in person according to how the teacher has explained this to the class. Attendance during consultation time is optional but you are encouraged to use this extra help to improve your learning outcomes.

Course Learning Materials

Learning materials are made available to you in the course site. The learning materials are arranged in Modules. In each Module you will find **Before Class** (Learning Content), **Classwork** (Learning Experiences), **Homework** (Learning Activities) and **Assessment** (Evidence of Learning). **Before Class** work will be engaged with prior to the scheduled **Classwork** (your weekly class). This will ensure you are prepared for the scheduled class by being aware of the content to be covered and therefore will be able to actively participate in the session. **Homework** (Learning Activities**)** are accessed after the scheduled session for purposes of review, consolidation of learning, and preparation for **Assessment (**Evidence of Learning Tasks) in the course.

In addition, **Anytime Anywhere** learning material is provided in the course. This learning material provides support, interactive tools and directions for students who occasionally cannot attend the weekly scheduled class (either in person or on Zoom) perhaps due to illness or other commitments. The Anytime Anywhere learning material should also be used in conjunction with before class and homework resources.

Self-Directed Learning

You will be expected to learn independently. This means you must organise and engage with the course content even when you are not specifically asked to do so by your teacher. The weekly guide will be helpful to organise your learning. This involves revising the weekly course learning material and completing the homework activities. It also means you will need to find additional information to evidence your learning beyond that given to you, and to construct your own response to a question or topic. All of this requires careful planning of your time. Expect to spend, on average, at least 10 hours per week including class time for each of your courses.

Program Progression

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, students are engaged in their learning 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].

Teacher and Course Evaluation

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

4. Before Class (Learning Content), Classwork (Learning Experiences) and Homework (Learning Activities) and Assessment (Evidence of Learning)

4.1. Modules for Learning and Weekly Before Class, Classwork, Homework and Assessment

	Before Class (Learning Content)	Classwork (Learning Experiences)	Homework (Learning Activities)	Assessment (Evidence of Learning)	Learning Outcome
					
	Module 1: Basic Arithmetic and Algebraic Techniques				
1	Arithmetic and re-introduction to basic mathematic skills	• Course Introduction • Introduction to Arithmetic • Order of Operations • Factors • Fractions • Surds • Arithmetic Kahoot Activity	Topic 1 – Arithmetic Activities		1,6
2	Algebra Introduction and Basics	• Introduction to Algebra • Expanding and Simplifying • Algebra Fractions • Algebra – Kahoot Activity	Topic 2 – Algebra Activities		1,6

3	Algebra and Problem Solving	• Rearranging equations • Solving for X • Simultaneous Equations using both Substitution and Elimination • Problem Solving Activities	Topic 2 – Algebra Activities Continued	**Module 1 Quiz – In Class**	**1, 6**
	Module 2: Functions – Linear, Quadratic and Exponential				
3	**Introduction to Functions**	• Introduction to Functions • Substituting X into Functions • Gradients • Distance Formula • Introduction to Graphing	Topic 3 – Linear Equations and Functions Activities		2,6
4	**Introduction to Quadratics**	• Factorising • Solving Quadratics by Factoring • The Quadratic Equation and it's Components • Solving Quadratics Using the Quadratic Equation	Topic 4 – Quadratic Equations and Functions Activities		2,6
5	**Introduction to Quadratics**	• Factorising • Solving Quadratics by Factoring • The Quadratic Equation and it's Components • Solving Quadratics Using the Quadratic Equation	Topic 4 – Quadratic Equations and Functions Activities		2,6
6	**Quadratic Functions and Graphing**	• Discriminant • Problem Solving Using the Quadratic Equation • Graphing Quadratic Functions	Topic 4 – Quadratic Equations and Functions Activities		2,6
7	**Introduction to Exponents and Logarithm Functions**	• Introduction to Exponents and Indices • Introduction to Logarithm • Natural Logarithm • Growth/Decay • Introduction to Exponential Functions and Graphing	Topic 6 – Exponents and Logarithm Activities	**Module 2 Quiz – In Class**	**1, 2, 4, 6**
	Module 3: Trigonometry				
8	**Introduction to Trigonometry**	• Introduction to Trigonometry • Right Angle Triangles • Sin, Cos, Tan • Finding Angles • Inverse Functions • Pythagoras	Topic 5 – Trigonometry Activities		**3,6**
9	**Trigonometry Continued**	• Non – Right Angle Triangles • Sin Rule • Cosine Rule • Triangle Area	Topic 5 – Trigonometry Activities Continued	**Module 3 Quiz – In Class**	**3, 6**

	Module 3: Financial Mathematics and Introduction to Statistics				
10	**Introduction to Financial Mathematic Concepts**	• Financial Mathematics Introduction • Percentages • Wages and Salary • Simple Interest • Compound Interest • Annuities • Stocks and Cryptocurrencies	Topic 6 – Financial Mathematics Activities		**1-6**
11	**Introduction to Statistics**	• Introduction to Statistics • Univariate Data Analysis • Quantitative and Qualitative Research • Mean, Median, Standard Deviation by Hand and by Microsoft Excel	Topic 7 – Statistics Activities (Requires Microsoft Excel)		**1-6**
12	**Course Wrap Up and Review Week**	• Course Wrap up • Assignment Help • Revision and Practice Exam		**Module 4 Assignment Due**	**1-6**
	Exam Week			**Module 4 – Final Exam**	**5, 6**

5. Assessment (Evidence of Learning)

5.1 Assessment Summary (Evidence of Learning Summary)

	Assessment	**Weighting**	**Learning outcome**	**Due Date**
1	Module 1 Quiz	15%	1, 6	Week 3
2	Module 2 Quiz	25%	1, 2, 4, 6	Week 7
3	Module 3 Quiz	20%	3, 6	Week 9
4	Module 4 Assignmnet	15%	4,5,6	Week 12
5	Module 4 Quiz	25%	5, 6	Exam Period

5.2 Assessment Task Detail (Evidence of Learning)

1. Assessment Task 1: Module 1 Quiz (15%)

Task Type: Quiz
Due Date: week 3
Weight: 15%, Marked out of: 20
Length: (if applicable) 1 hour
Task Description: This quiz will be held in class time, during the second class of the week. You must access the quiz at a certain time, which will be given to you by your teacher, and you must complete the quiz with your cameras on.
Criteria and Marking: This quiz incorporates both multiple choice and short answer problem solving questions, from the topics covered in Weeks 1 – 3.
Submission: online quiz/exam

2. Assessment Task 2: Module 2 Quiz (25%)

Task Type: Quiz
Due Date: week 7
Weight: 25%, Marked out of: 20
Length: (if applicable) 1 hour
Task Description: This quiz will be held in class time, during the second class of the week. You must access the quiz at a certain time, which will be given to you by your teacher, and you must complete the quiz with your cameras on.
Criteria and Marking: This quiz incorporates both multiple choice and short answer problem solving questions, from the topics covered in Weeks 4 - 7.
Submission: online quiz/exam

3. Assessment Task 3: Module 3 Quiz (20%)

Task Type: Quiz
Due Date: week 9
Weight: 20%, Marked out of: 20
Length: (if applicable) 90 minutes
Task Description: This quiz will be held in class time, during the second class of the week. You must access the quiz at a certain time, which will be given to you by your teacher, and you must complete the quiz with your cameras on.
Criteria and Marking: This quiz incorporates both multiple choice and short answer problem solving questions, from the topics covered in Weeks 8 – 9.
Submission: online quiz/exam

4. Assessment Task 4: Module 4 Assignment (15%)

Task Type: Written assignment
Due Date: 12
Weight: 15%, Marked out of: 25
Length: (if applicable)
Task Description: This will be provided on the course site when your assignment is given to you by your teacher in class.
Criteria and Marking: This will be provided on the course site when your assignment is given to you by your teacher in class.
Submission: All submissions must be uploaded in the correct document format (word or excel) to the submission link that will be available under the 'Assessment Summary' tile on the course site. No submissions will be accepted via email.

5. Assessment Task 5: Module 4 Quiz (25%)

Task Type: Quiz
Due Date: week 13
Weight: 25%, Marked out of: 20
Length: (if applicable) 90 minutes
Task Description: This quiz will be held in class time, during the second class of the week. You must access the quiz at a certain time, which will be given to you by your teacher, and you must complete the quiz with your cameras on.
Criteria and Marking: This quiz incorporates both multiple choice and short answer problem solving questions, from the topics covered in Weeks 10 – 12
Submission: online quiz/exam

In order to pass this Course, students must:

A. Attempt all assessment items
B. Demonstrate assurance of learning of all learning outcomes through graded Assessment Tasks.

5.3 Late Submission

An Assessment Task submitted after the due date, without an approved extension from the teacher, will be penalised. The standard penalty is the reduction of the mark allocated to the Assessment Task by 5% of the maximum mark applicable for the Assessment Task, for each working day or part working day that the task is late. Assessment tasks submitted more than five working days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > Assessment Policy for guidelines and penalties for late submission.

5.4 Other Information about Assessments (Evidence of Learning)

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.

Requests for extension

To apply for an extension of time for an evidence of learning task, 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 Student Medical Certificate]. Please refer to the Griffith College website – Policy Library for guidelines regarding extensions and deferred Evidence of Learning Tasks.

Return of Evidence of Learning Tasks

1. Marks awarded for in-trimester evidence of learning tasks, except those being moderated externally with Griffith University, will be available on the course site within fourteen [14] days of the due date. This does not apply to the final evidence of learning task in this course (marks for this task will be provided with the final course result).

2. Students will be advised of their final grade through the Digital Campus. Students can review their final exam papers after student grades have been published. Review of final exam papers will not be permitted after the final date to enrol.

3. Marks for **all** evidence of learning tasks including the final exam (if applicable) will be recorded in the Course Site and made available to students through the Course Site.

The sum of your marks of evidence of learning *tasks in this course does not necessarily imply your final grade for the course. Standard grade cut off scores can be varied for particular courses, so you need to wait for the official release of grades to be sure of your grade for this course.*

6. Policies & Guidelines

Griffith College Evidence of Learning Tasks-related policies can be found in the Griffith College Policy Library which include the following policies:

Assessment Policy, Special Consideration, Deferred Assessment, Alternate Exam Sittings, Medical Certificates, Academic Integrity, Finalisation of Results, Review of Marks, Moderation of Assessment, Turn-it-in Software Use. These policies can be accessed within the Policy Library

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 teachers 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 an allegation of a breach of academic integrity being 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 Griffith College website - Policy Library > Academic Integrity Policy

Reasonable Adjustments for Evidence of Learning Tasks – The Disability Services policy

The Disability Services policy (accessed within the Policy Library) outlines the principles and processes that guide the College in making reasonable adjustments to Evidence of Learning Tasks for students with disabilities while maintaining academic robustness of its programs.

Risk Assessment Statement

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

Note: Griffith College acknowledges content derived from Griffith University in Diploma level courses, as applicable.