NEWSTEAD COLLEGE
MATHS

2017
SUBJECT OFFERINGS

Essential Maths 2
MTN210114

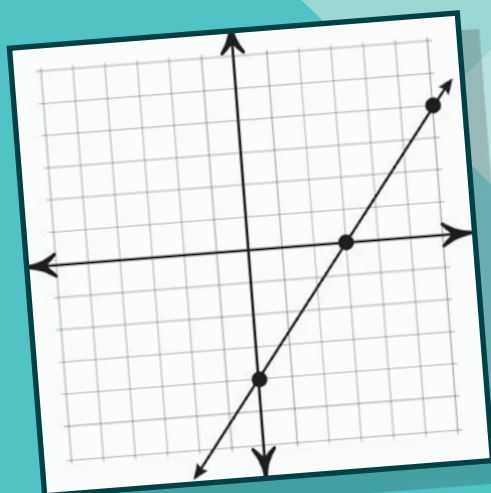|	
TCE Points	10 credit points
Level	2
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	YES
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	NO
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
PREREQUISTE	Achieved a D or E award for maths in Year 10. Note: students who have already gained a C result cannot do this course
EXTRA CURRICULA OPPORTUNITIES	Students may also have the opportunity to get their ICT tick & 5 points towards their TCE if time allows in this course

SUBJECT DESCRIPTION

The aim of the course is to learn about:

- **Everyday maths with real world problems.**
- **Number Operations.**
- **Measurement and Graphing.**
- **Maps and Plans.**
- **Basic calculator skills.**

Past Students Said:

"Essential Maths 2 is great for students who are aiming to improve their numeracy skills in a supportive and engaging environment.

MATHS

General Maths 3
MTG315115

TCE Points	15 credit points
Level	3
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	YES
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	YES
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
HIGHLY RECOMMENDED	A or B standard (C by negotiation) in Maths in Year 10.
SUGGESTED FOUNDATION SUBJECT YR 11	Can be studied in year 11 or 12. General Maths 2 (Foundation) is the foundation subject for General Maths 3
EXTRA CURRICULA OPPORTUNITIES	Range of Mathematics Investigations.

SUBJECT DESCRIPTION

General Maths 3 is designed to give students a real world context to maths whilst having a high level of academic rigour.
You will:

- **Trigonometry and world geometry.**
- **Growth and decay (sequences, series and recurrence modelling).**
- **Finance.**
- **Bivariate data analysis.**
- **Networks.**

Past Students Said:

"It's a lot different to high school, I liked the practical investigations and the world geometry."

"You need to have a good understanding of worded questions"

MATHS

General Mathematics Foundation 2
MTG215114

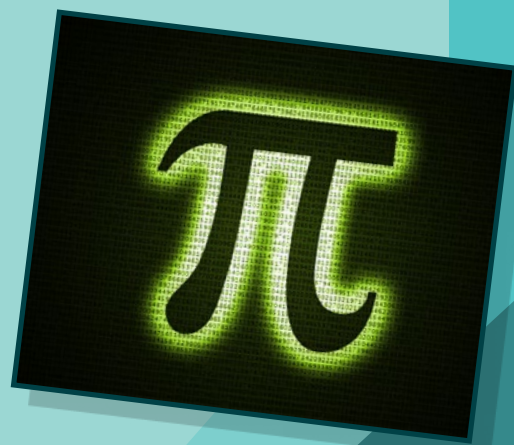|	
TCE Points	15 credit points
Level	2
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	YES
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	NO
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
HIGHLY RECOMMENDED	B or C in Year 10 Australian Curriculum Mathematics.
EXTRA CURRICULA OPPORTUNITIES	Excursion to real life situations

SUBJECT DESCRIPTION

The aim of the course is to learn about:

- **Practical problems linked to a range of mathematical concepts.**
- **Shapes and measurement.**
- **Consumer arithmetic.**
- **Linear equations and their graphs.**

This subject aims to:

- **Prepare students who wish to further their mathematics education before seeking employment or attempting a range of postsecondary courses**
- **Provide sufficient numeracy skills for real world**
- **Provide a pathway to General Mathematics 3**

Past Students Said:

"We cover important subjects that are needed throughout, not only school life, but also for our chosen future career"

"Important math skills that are delivered in a fun environment. Also provides a good foundation for a higher level math class in the future."

MATHS

Maths Methods Foundation 3
MTM315***

TCE Points	15 credit points
Level	2 in 2016 and 3 from 2017
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	YES
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	Possibly
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
HIGHLY RECOMMENDED	A or B standard for Maths in year 10.
SUGGESTED FOUNDATION SUBJECT YR 11	This subject is the foundation subject for Maths Methods 4

SUBJECT DESCRIPTION

This subject will improve your mathematical skills and prepare you for Methods 4. It is also an excellent background for General Maths 3. You will study the following topics:

- **Algebra.**
- **Functions and Graphs.**
- **Circular (Trigonometric) Functions.**
- **Exponential and Log Functions.**
- **Calculus.**
- **Probability.**

Past Students Said:

"Methods 2 really prepared me well for methods 3 this year"

MATHS

Mathematics Specialised 4
MTS415114

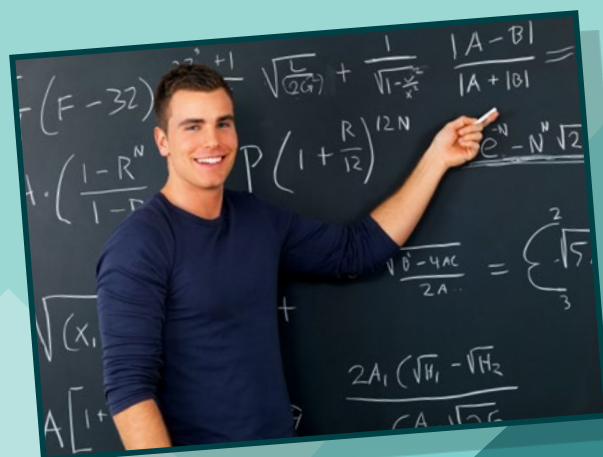|	
TCE Points	15 credit points
Level	4
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	YES
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	YES
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
HIGHLY RECOMMENDED	Complete Mathematics Methods 3 Prior understanding from Maths Methods 2 is a requirement for this course.
EXTRA CURRICULA OPPORTUNITIES	Excursions related to engineering/ Science lab/ Medicine

SUBJECT DESCRIPTION

The aim of the course is to learn about:

- **Pure algebraic skills and their real world relevance**

- **Sequences and series**

- **Matrices/ Complex numbers**

- **Differential and integral calculus**

- **Applications**

This subject aims to:

- **Provide an excellent foundation for students undertaking university studies in mathematics, science or engineering.**

- **Is recommended for entrance into some mainland university courses**

MATHS

Workplace Mathematics 2
MTW215114

TCE Points	15 credit points
Level	2
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	YES
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	NO
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
HIGHLY RECOMMENDED	C or D from year 10
EXTRA CURRICULA OPPORTUNITIES	Investigations into workplace numeracy Beacon blackboard activities

SUBJECT DESCRIPTION

Workplace Maths 2 is designed to provide students with necessary skills and understanding required by the workplace. In this course you will learn about:

- **Calculations, algebra, ratios and rates.**
- **Shapes and measurement.**
- **Tables, Graphs, Diagrams and Data.**
- **Time and Motion.**

This is done through practical work, problem solving and investigations.

Past Students Said:

"It's a good course, delivered in a fun environment. It gives you skills that are essential for work"

"We cover important subjects that are needed throughout, not only school life, but also for our chosen future career"

MATHS

Maths Methods 4
MTM415***

TCE Points	15 credit points
Level	3 in 2016, 4 from 2017
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	YES
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	YES
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
DESIRED SKILLS	A or B standard minimum from Year 10 or Maths Methods 2 (CA or better). Prior understanding from Maths methods 2 is a requirement for this course.
SUGGESTED FOUNDATION SUBJECT YR 11	Maths Methods 2 (2016)
EXTRA CURRICULA OPPORTUNITIES	Maths Competitions Master Classes for High Schools

SUBJECT DESCRIPTION

The aim of the course is to develop algebra and problem solving skills through the study of functions, calculus, probability and statistics. The topics covered are:

- **polynomial, hyperbolic, exponential and logarithmic functions.**

- **circular functions.**

- **differential calculus in the study of functions.**

- **integral calculus in the study of functions.**

- **binomial and normal probability distributions.**

Past Students Said:

"This course really helped me develop my algebra skills"

"If you want success in this subject you really need to work hard all the time!"

MATHS