

NAME:	
EMPHASIS:	

# SCHOOL of SCIENCE, MATHEMATICS, TECHNOLOGY & HEALTH

Department of Mathematics B.A. in Mathematics

Students are required to complete 24 Mathematics core units, 24-26 Mathematics emphasis units (see back of form), 37 general education units, and 21 biblical studies units. A minimum total of 122 units are required to graduate.

## **MATHEMATICS CORE COURSES**

Units	Term	
3		CS111 Introduction to Computer Programming
3		MA121 Calculus I
3		MA122 Calculus II
3		MA221 Calculus III
3		MA231 Linear Algebra
3		MA282 Ordinary Differential Equations
3		MA302 Introduction to Mathematical Proof
1		MA400 Mathematics Seminar
1		MA400 Mathematics Seminar
1		MA412 Integrated Review
24		Total units required for core

#### **BIBLICAL STUDIES**

Units	Term	
3		B121 Essentials of Christian Thought
3		B101 Old Testament Survey I
3		B102 Old Testament Survey II
3		B201 New Testament Survey I
3		B202 New Testament Survey II
3		BTH 321 Christian Theology I
3		BTH 322 Christian Theology I
21		Total units required

#### **GENERAL EDUCATION**

Units	Term	
3		C100 Spoken Communication
3		E110 English Composition
3		ECN200 Essentials of Economics & Society
3		H211 Essentials of World History I
3		H212 Essentials of World History II
3		H230 Essentials of U.S. History
2		LS150 Essentials of Biology or
3		GS150 Essentials of Geology
1		LS150L Essentials of Biology Lab or
		GS150L Essentials of Geology Lab
3		MU190 Essentials of Music & Art
3		P311 Essentials of Philosophy
3		POL220 U.S. Government
3		Literature Survey (choose one - see below*)
3		Literature Elective (choose one - see below * or **)
37		Total units required for emphasis

\* E211 / E212 English Literature I or II E221 / E222 World Literature I or II E231 / E232 American Literature I or II

\*\* E120 Introduction to Literature E313 Age of Romanticism E314 Victoria Age

E334 The Short Story

E335 The English Novel

E374 Studies in Jane Austen

E404 Studies in John Calvin

E405 Shakespeare

E406 Milton

**E415 Contemporary Literature** 

**E416 Modern British Writers** 

E425 20th Century American Literature

E453 Psychoanalytic Criticism

# **EMPHASIS COURSES**

## **PURE MATHEMATICS**

Units	Term	
2		MA222 Calculus IV
3		MA344 Modern Geometry
3		MA355 Number Theory/History of Mathematics
3		MA383 Complex Analysis
3		MA453 Abstract Algebra I
3		MA482 Topics in Mathematics
ADDITIONAL APPROVED UPPER DIVISION MATHEMATICS COURSES		
3		
		1

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3	
3	

Total units required for emphasis 26

# MATHEMATICS EDUCATION EMPHASIS COURSES

Units	Term	
3		P321* Philosophy of Education
3		MA253 Discrete Mathematics
3		MA262 Elementary Statistics
3		MA344 Modern Geometry
3		MA355 Number Theory/History of Mathematics
3		MA425 Mathematical Modeling
3		MA453 Abstract Algebra I

ADDITIONAL APPROVED UPPER DIVISION MATHEMATICS COURSES

3	
24	Total units required for emphasis

<sup>\*</sup>Can be taken instead of P311 to satisfy the General Education philosophy requirement; teaching credential program prerequisite.

## **APPLIED MATHEMATICS**

Units	Term	
2		MA222 Calculus IV
3		MA253 Discrete Mathematics
3		MA365 Probability
3		MA366 Mathematical Statistics
3		MA383 Complex Analysis
3		MA425 Mathematical Modeling
3		MA463 Introduction to Applied Mathematics
3		MA464 Methods in Applied Mathematics
3		MA482 Topics in Mathematics
26		Total units required for emphasis

## **PRE-ENGINEERING EMPHASIS**

Units	Term	
4		PS251 General Physics I
4		PS252 General Physics II
1		MA114 Introduction to Engineering
2		MA221 Calculus IV
3		MA425 Mathematical Modeling
3		MA463 Introduction to Applied Mathematics
3		MA464 Methods in Applied Mathematics
TWO C	OF THE FOLL	OWING:
3		MA253 Discrete Mathematics
3		MA365 Probability
3		MA366 Mathematical Statistics
3		MA383 Complex Analysis
26		Total units required for emphasis

#### **MINOR IN MATHEMATICS**

MINOR IN MATTEMATION		
Units	Term	
3		CS111 Introduction to Computer Programming
3		MA121 Calculus I
3		MA122 Calculus II
3		MA221 Calculus III
3		MA231 Linear Algebra
3		MA282 Ordinary Differential Equations
ONE OF THE FOLLOWING		
1		MA400 Mathematics Seminar

1	MA400 Mathematics Seminar
1	MA412 Integrated Review

ADDITIONAL APPROVED UPPER DIVISION MATHEMATICS COURSE

3

22

Total units required for each emphasis