APPROVED: Office of Academic Affairs

DATE PALIFIED IN

# BACHELOR OF SCIENCE: Proposed Curriculum 2014/2015 MAJOR: STATISTICS

FRESHMAN YEAR		F	S
MATH 241, 242	Calculus L II	3	3
MATH 271	Elementary Statistics	3	
STAT 272	Data Analysis		3
ENG 104, 105	Composition	3	3
SCI OPT	Science Option	3	3/4 3
HIST 101, 102 <sup>2</sup> UNIV 100	History of Civilization University Success	3 2	3
FORN LNG	Foreign Lang Option	3	3
TORIVENO	Totals	17	18/19
SOPHOMORE YEAR			
MATH 243, 244	Calculus III, IV	3	3
MATH 331	Lin Alg. & Matrix Thry		3
STAT 300	Regression Analysis		3
ENG 205	World Literature I	3	
or			
ENG 206	Literature of Science	3	_
	FINE ART OPTION	•	3 1
PE OPT or	2-100 Level Courses	1	1
HE 101	Health	3	
<sup>4</sup> SS OPT	Social Science Option	3	
<sup>1</sup> SCI OPT	Science Options w Labs	3/4	4
STAT 350 Comp.	Stat. & Data Management		17/1/
HINDON STEAD	Totals	16/19	17/16
JUNIOR YEAR			
MATH 355	Prob. & Statistics I	3	
MATH 356	Prob. & Statistics II		3
MATH 368	Ordinary Differential Eqs	S.	3
STAT 455	Experimental design		3
<sup>7</sup> SPCH OPTION		3	_
<sup>8</sup> ELEC	General Elective		3
STAT 357	Actuarial.Sc. Exam 1 Pre		3
MATH 351	Advanced Calculus	3	
<sup>1</sup> SCI OPT	Science Option	4 13	15
SENIOR YEAR	Totals	13	1.5
,			
STAT 323	Nonparametric Statistics	3	2
STAT 418	Statistics Seminar		3
STAT 408	Time Series Analysis	,	3 3
PHIL OPTION ELEC	General Elective	3	3
STAT 414	Multivariate Data Analys	<del>-</del>	
<sup>1</sup> SCI OPT	Science Option	3/4	
BCI CI I	Totals	12/13	12
	1000	· · · · · · · · · · · · · · · · · · ·	**

· TOTAL HOURS: 120-124

#### NOTES:

<sup>1</sup> See the list of Science Options.

<sup>2</sup> Students who transfer 12 or more hours of college credit are exempt from this course but must meet the minimum degree requirements.

<sup>3</sup> Students who have completed two years of a foreign language in high school with a "C" or above are exempt from the foreign language requirement but must take six additional semester hours of coursework. See list of Foreign Language Options.

<sup>4</sup> See the list of Social Science Options.

<sup>5</sup> See the list of Humanities and Fine Arts Options

<sup>6</sup> See the list of Philosophy Options

<sup>7</sup> See the list of Speech Options

<sup>8</sup> General electives must be taken with the consultation of the department academic adviser

## Specialization Courses:

## Pure Mathematics

MATH 311W Abstract Algebra I

MATH431 Real Analysis

MATH 441 Complex Variables

MATH 321 Modern Geometry

MATH341Intro. to Number Theory

MATH 451 General Topology

MATH 332 Linear Algebra & Matrix

Theory with Applications

## Applied Mathematics

MATH415 Partial Differential Equations

MATH 215 Financial Mathematics

MATH 430 Mathematical Modeling

MATH 385 Numerical Analysis

MATH 466 Operations Research

#### Applied Statistics

STAT 424 Internship in Statistics

STAT 447 Sampling Methods

MATH 461 Mathematical Statistics

STAT 496 Independent Study

STAT 301 Intro Experimental Design

General Education and Electives

## Science Options:

BIO 101 Biological Science & Lab

BIO 111 Introduction to Biology & Lab

BIO 202 Elementary Biostatistics with Lab

BIO 318 Introduction to Genetics with Lab

**BIO 409 General Genetics** 

SCI 201 or 202 Physical Science & Lab

SCÍ 205 Earth & Space Science

CHEM 201 Chemistry & Society & Lab

CHEM131Introduction to Chemistry

CHEM141 or142 General Chemistry I or II

#### & Labs

PHY 151 Introduction to Physics

PHY 201 or 202 Basic Physics I or II &

Labs

PHY 211 or 212 General Physics I or II &

Labs

PHY 241 Introduction to Astronomy

MET200 Introduction to Meteorology

#### Foreign Language Options:

FR 101 & 102 Elementary French

GR 101 & 102

Elementary German

SP 101 & 102

Elementary Spanish

LAT 101 & 102

Elementary Latin

POR 101 & 102

Elementary Portuguese

CHI 101 & 102

Mandarin Chinese

## Social Science Options:

SS 201 or 202 Social Institutions

GEO115 Introduction

to Cultural

Geography

GEOG209WorldRegional Geography

SOC 214 Introduction to Sociology

SOC 325 Cultural Anthropology

PS 344 Introduction to Political Science

PS 335 American Government

PS 336 State and Local Government

Eco211 or 212 Principles

Economics/Statistics

PSY 201/111-112 General/Introduction to

Psychology

## Philosophy Options:

PHIL 301 Introduction to Philosophy

PHIL 416 Logic

## Humanities and Fine Arts Options:

ART 206 Art Appreciation

MUS 205 Music Appreciation

DR 201 Introduction to Drama

Eng 201/202 Humanities

## Speech Options:

SPCH 201 Speech Arts

SPCH334Argumentationand Debate

SPCH 335 Persuasions

SPCH 430 Small Group Discussions