

MATHEMATICS, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME FONTBONNE UNIVERSITY		EDUCATOR PREPARATION PROGRAM CODE 038603	
A. Professional Requirements (Minimum of 26 semester hours)			
1. Content Planning and Delivery			
	Course Number	Course Title	Semester Hours
a. Curriculum and Instructional Planning	EDU269	Critical Skills in the Teaching Profession with Field Experience	1
	EDU271	Introduction to Content Planning, Delivery and Assessment	1
	EDU447	Planning of Instruction and Assessment- Middle and Secondary	1
b. Instructional Strategies and Techniques in Content Area Specialty	EDU271	Introduction to Content Planning, Delivery and Assessment	1
	EDU313	Methods and Practicum for Middle/Secondary/Community Education	1
c. Assessment, Student Data, and Data-Based Decision-Making	EDU271	Introduction to Content Planning, Delivery and Assessment	1
	EDU447	Planning of Instruction and Assessment- Middle and Secondary	1
d. Strategies for Content Literacy	EDU350	Methods of Teaching Reading in the Content Areas	0
e. Critical Thinking and Problem Solving	EDU268	Introduction to Learner Development	1
	EDU447	Planning of Instruction and Assessment- Middle and Secondary	1
f. English Language Learning	EDU270	Introduction to Learner Diversity	.5
2. Individual Student Needs			
	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PSY200	Developmental Psychology	3
b. Psychology/Education of the Exceptional Child	EDU270	Introduction to Learner Diversity	1
c. Differentiated Learning	EDU270	Introduction to Learner Diversity	.5
	EDU313	Methods and Practicum for Middle/Secondary/Community Education	1
d. Classroom Management	EDU401	Classroom/Behavior Management	3
e. Cultural Diversity	EDU270	Introduction to Learner Diversity	.5
f. Educational Psychology	EDU268	Introduction to Learner Development	1
3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU268	Introduction to Learner Development	1
	EDU270	Introduction to Learner Diversity	.5
b. Legal/Ethical Aspects of Teaching	EDU269	Critical Skills in the Teaching Profession with Field Experience	1
4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDU350	Methods of Teaching Reading in the Content Areas	3
b. Instructional Interventions for Students with Reading Deficits	EDU306	Analysis and Correction of Reading Difficulties	3
Professional Requirements - Total Semester Hours			28
B. Field and Clinical Experiences (Minimum of ten semester hours)			
	Course Number	Course Title	Semester Hours

1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	EDU269	Critical Skills in the Teaching Profession with Field Experience	1
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDU313	Methods and Practicum for Middle/Secondary/Community Education	1
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDU451	Student Teaching at Secondary Level	10
Field and Clinical Experiences - Total Semester Hours			12
C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)			
	Course Number	Course Title	Semester Hours
1. Calculus and Analytical Geometry (nine semester hours)	MTH150 MTH151 MTH250	Calculus with Analytic Geometry I Calculus with Analytic Geometry II Calculus with Analytic Geometry III	4 4 4
2. Algebraic Structures (three semester hours)	MTH430	Algebraic Structures	3
3. Geometry (three semester hours)	MTH320	Elements of Geometry	3
4. Computer Science (three semester hours)	CIS160	Computer Science	4
5. Electives from the above coursework (six semester hours)	Choose Two: MTH120 MTH310 CIS120 CIS210 CIS300 CIS 465	Discrete Mathematics Differential Equations Overview of Computer and Information Science Object-Oriented Programming (Java) Modeling and Numerical Approximation Robotics	3 3 3 3 3 3
6. Additional Mathematics coursework – Minimum of 12 semester hours to include at least three of the following areas of Mathematics:			
a. History of Mathematics (three semester hours)	MTH305	Readings in the History of Mathematics	2
b. Structure of the Real Number System (three semester hours)			
c. Number Theory (three semester hours)			
d. Completion of Calculus Sequence (three semester hours)			
e. Probability and Statistics (three semester hours)	MTH115	Introduction to Statistics	3
f. Computer Science (three semester hours)	CIS161	Advanced Programming Using C++	4
g. Linear Algebra (three semester hours)	MTH200	Linear Algebra	3
Content Knowledge Area - Total Semester Hours			40