

MATH, GRADES 9-12

Master of Arts in Teaching - Math

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	EDU569	Critical Skills in Teaching Profession w/Field Experience	1
	OR		
	EDU269	Critical Skills in Teaching Profession w/Field Experience	
	OR		
	EDU531	The Contemporary Classroom	
	EDU575	Content Planning, Delivery and Assessment	1
	OR		
b. Instructional Strategies and Techniques in Content Area Specialty	EDU271	Content Planning, Delivery and Assessment	
	OR		
	EDU547	Curriculum Design, Assessment, and Improvement	1
	EDU518	Methods & Practicums for Mid/Sec/Comm. Education	
	OR		
c. Assessment, Student Data, and Data-Based Decision-Making	EDU313	Methods & Practicums for Mid/Sec/Comm. Education	
	EDU575	Content Planning, Delivery and Assessment	1
	OR		
	EDU271	Content Planning, Delivery and Assessment	
	OR		
d. Strategies for Content Literacy	EDU547	Curriculum Design, Assessment, and Improvement	1
	EDU597	The Instructional Process	
	EDU568	Exploration of Learner Development	.5
	OR		
	EDU268	Introduction to Learner Development	
	OR		
	EDU541	Frameworks for Learning	1
	EDU550	Reading & Writing in Content Area	

e. Critical Thinking and Problem Solving	EDU568 OR EDU268 OR EDU541 EDU597	Exploration of Learner Development OR Introduction to Learner Development OR Frameworks for Learning The Instructional Process	1 1
f. English Language Learning	EDU572 OR EDU270	Exploration of Learner Diversity OR 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	EDU572 OR EDU270	Exploration of Learner Diversity OR Introduction to Learner Diversity	1
c. Differentiated Learning	EDU572 OR EDU270	Exploration of Learner Diversity OR Introduction to Learner Diversity	.5
	EDU518 OR EDU313	Methods & Practicums for Mid/Sec/Comm. Education OR Methods and Practicums for Mid/Sec/Comm. Education	.5
d. Classroom Management	EDU500	Classroom/Behavior Management Techniques	3
e. Cultural Diversity	EDU572 OR EDU270	Exploration of Learner Diversity OR Introduction to Learner Diversity	.5
	EDU518 OR EDU313	Methods & Practicums for Mid/Sec/Comm. Education OR Methods and Practicums for Mid/Sec/Comm. Education	.5
f. Educational Psychology	EDU568 OR EDU268 OR EDU541	Exploration of Learner Development OR Introduction to Learner Development OR Frameworks for Learning	1
3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU568 OR EDU268 OR EDU541	Exploration of Learner Development OR Introduction of Learner Development OR Frameworks for Learning	.5
	EDU572 OR EDU270 OR EDU586	Exploration of Learner Diversity OR Introduction to Learner Diversity OR Studies in Disabilities and Exceptionality	.5

b. Legal/Ethical Aspects of Teaching	EDU569 OR EDU269 OR EDU531	Critical Skills in Teaching Profession w/Field Experience OR Critical Skills in Teaching Profession w/Field Experience OR The Contemporary Classroom	1
--------------------------------------	--	--	---

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDU550 EDU549	Reading and Writing Across Curriculum Foundations of Reading Instruction	2 3
b. Instructional Interventions for Students with Reading Deficits	EDU553	Analysis and Correction of Reading Difficulties	3
Professional Requirements - Total Semester Hours			31

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)	EDU569 OR EDU269 OR EDU531	Critical Skills in Teaching Profession w/Field Experience OR Critical Skills in Teaching Profession w/Field Experience OR The Contemporary Classroom	1
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDU518 OR EDU313	Methods & Practicums for Mid/Sec/Comm. Education OR Methods and Practicums for Mid/Sec/Comm. 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 w/Analytic Geometry Calculus w/Analytic Geometry II Calculus w/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	Advanced Programming Using C++	4
5. Electives from the above coursework (six semester hours)	Choose Two: MTH120 MTH310 CIS120 CIS210 CIS300	Discrete Mathematics Differential Equations Overview of Computer and Information Science Object-Oriented Programming Modeling and Numerical Approximation	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 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