

Middle School Math and Science, B.S.

General Education Requirements

Major Requirements (Grade of "C-" or higher is required unless otherwise stated)

Fundamental Studies				Benchmark 1 Requirements (by 30 credits)	
Requirements: __credits	Course	Credits	Grade	MA with C- or higher	3 or 4
Academic Writing (AW)it	(eing (AW)i85 (i)oiGdiL9.6 JETEMC QBT1(TEMC (i)o)74I(G)(diL9.6 JETJEMC ET/P AVCID 2. Benchmark 2 Requirements (by 60 credits) h)-2)			MATH 213	3

Gateway Courses to be completed with 2.7 or higher:

Distributive Studies

Natural Science Lab (NL)	PHYS 115
Natural Sciences (NL)	GEOL 100/110
History/Social Sciences (HS)	TLPL 360
History/Social Sciences (HS)	EDHD 413
Humanities (HU)	
Humanities (HU)	
Scholarship in Practice (SP)	TLPL 252
Scholarship in Practice (SP; non major)	

Requirements: __credits	Course	Credits	Grade		
Big Questions	AOSC 200				
Big Questions					

Requirements: __credits	Course	Credits	Grade		
Understanding Plural Soc. (UP)					
Understanding Plural Soc. (UP) or Cultural Competency (CC)					

Requirements: __credits	Course	Credits	Grade		
			N/A		
			N/A		

Requirements for Graduation:

- At least 30 credits must be earned at UMD
- 15 of the final 30 credits must be earned at the 300-400 level
- 12 upper level major credits must be earned at UMD
- Students must earn a minimum of 120 credits to complete a degree.

Elements of Geometry and Measurements	3
---------------------------------------	---

Major Requirements

MATH 212 Elements of Numbers and Operations	3
MATH 213 Elements of Geometry and Measurements	3
MATH 214 Elements of Probability and Statistics	3
MATH 312 Math Reason and Proof for Pre-Serv MS	3
MATH 314 Intro to Prob, Data, Alaly, and STAT for Pre-Serv MS	3
MATH 315 Algebra for Middle School	3
PHYS 115 Inquiry Into Physics	4
GEOL 100/110 Physical Geology/lab	4
BSCI 103, 160/161, 170/171 BIO, ECOL EVOL/Lab, CELL BIO/Lab	4
CHEM 131/132 CHEM Fundamentals I/Lab	4
AOSC 200/201 Weather and Climate	4
Science Elective	3 or 4
TLPL 101 & TLPL 102 (or TLPL 251) (B- or higher) Intro to Teaching	3
TLPL 252 (Spring only) Students, Schools, and Community	3

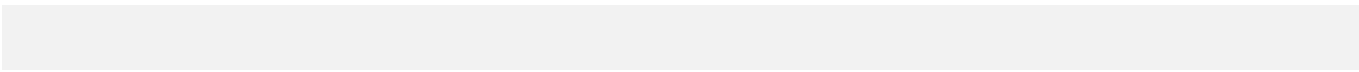
TLPL 250 (HU) or 360 (HS) HIST/PHIL Persp on Ed, Foundations of Educ	3
EDHD 413 Adolescent Development	3
EDHD 436 Cognition and Motivation in Content Literacy for MS Students	3
TLPL 462 Reading in the Secondary School	3

TLPL 413 Teaching and Learning in Middle school Mathematics	3
TLPL 420 Knowledge, Reasoning, and Learning in Sinece	3
TLPL 423 Interdisciplinary Teaching in Middle Grades I	2
TLPL 475 Equitable Classrooms	2
TLPL 479E Field Experience: Middle school Educaiton	1
TLPL 477 Teaching Academically, Culturally and Linguistically Diverse Stds in Middle School & Secondary Ed	2

Yearlong Internship Spring Only

TLPL 489E internship in Education: Middle School	12
TLPL 424 Middle school Teaching II	2
TLPL 476 Equity and Pedagogy	2

Year 1		Fall	Cr.	Spring	Cr.
Benchmark Requirements		ENGL 101 (AW)	3	MATH 212	3
Fundamental AW with C- or higher		Mathematics (MA)	3	Science Sequence II (GEOL 100/110) (NL)	4
Fundamental MA with C- or higher		Science Sequence I (PHYS 115) (NL)	4	Humanities (HU)*	3
		Humanities (HU)*	3	History/Social Science (HS)*	3
		TLPL 101	1	TLPL 102	2
		UNIV 100	1		
		<i>Total</i>	<i>15</i>	<i>Total</i>	<i>15</i>
Year 2		Fall	Cr.	Spring	Cr.
Gateway Requirements		MATH 213	3	TLPL 252 (SP)	3
Gateways must be completed by 60 credits		Science Sequence III (CHEM 131/132)	4	MATH 214	3
Gateways courses to be completed with 2.7		TLPL 250 or 360	3	Science Sequence IV (BSCI 103, 160/161, or 170/171)	4
MATH 212		Oral Communication (OC)	3	Analytic Reasoning (AR)	3
MATH 213		Scholarship in Practice (SP; non-major)	3	EDHD 436 (offered even years only)	3
Biological Lab Science (NL)		<i>Total</i>	<i>16</i>	<i>Total</i>	<i>16</i>
Physical Lab Science (NL)					
TLPL 101 & TLPL 102 with B- or higher					
Test of Basic Skills					
Year 3		Fall	Cr.	Spring	Cr.
Cumulative GPA of 2.75		TLPL 413	3	MATH 312	3
		Science Sequence V (AOSC 200/201) (IS)	4	Science Sequence VI (Elective)	3
		EDHD 413 (HS)	3	Elective (Gen Ed as needed*)	3
		TLPL 462	3	Professional Writing (PW)	3
		Elective	3	Elective	3
		<i>Total</i>	<i>16</i>	<i>Total</i>	<i>15</i>
Apply to the COE by December 1st.					
Year 4		Fall	Cr.	Spring	Cr.



Gateway Courses	Grade (need a C- or better)	Quality Points
MATH 212		
MATH 213		
Biological Lab Science		