# **IONMOUTH UNIVERSITY CURRICULUM CHART**

0 - 5.0

### Bachelor of Science in Mathematics and Education with Endorsement in Elementary Education MAJOR REQUIREMENTS/MATHEMATICS: 43 Credits MAJOR REQUIREMENTS/EDUCATION: 36 Credits (a) MA-120: Intro to Mathematical Reasoning 4.0 ED-250: Psychological & Philosophical 3.0 Foundations of Education MA-125: Calculus with Analytic Geometry I 4.0 MA-126: Calculus with Analytic Geometry II 4.0 EDS-330: Foundations of Special Education: 3.0 Development Across the Life Span MA-220: Probability and Statistics I 3.0 MA-221: Linear Algebra 3.0 EDS-336: Classroom Management 3.0 MA-225: Calculus with Analytic Geometry III 4.0 MA-314: Number Theory 3.0 EDL-326: Literacy Instructions in K-6 3.0 Educational Settings I MA-317: Geometry 3.0 MA-325: History of Mathematics 3.0 MA-410: Modern Algebra 3.0 MA-415: Real Analysis 3.0 ED-320: Teaching Students with Diverse Needs Take 6 Credits from Mathematics (MA) 6.0 from levels 300+, 400+ MA-xxx: EDL-327: Literacy Instruction in K-6 MA-xxx: 3.0 Educational Settings II INTERDISCIPLINARY (MA) REQUIREMENTS: 12 to 14 Credits ED-360: Methods of Teaching Elementary 3.0 MA-237: Prog. & Tech. in Mathematics 4.0 \*OR\* CS-175: Intro to Computer Science I 3.0 and CS-175L: Intro to Computer Science I Lab 1.0 Complete one of the following groups ED-361: Methods of Teaching Science for 3.0 Elementary School Group A - (8 credits): 3.0 CE-111: General Chemistry I CE-111L: General Chemistry I Lab 1.0 CE-112: General Chemistry II 3.0 CE-112L: General Chemistry II Lab 1.0 ED-362: Teaching Elementary Social Studies 3.0 \*OR\* Group B - (10 credits): PH-211: General Physics w/Calculus I 4.0 PH-211L: General Physics w/Calculus I Lab 1.0 9 Credits as Follows (b): ED-416: Clinical Practice AND 8.0 PH-212: General Physics w/Calculus II 4.0 PH-212L: General Physics w/Calculus II Lab ED-416S: Seminar in Clinical Practice 1.0 1.0 \*OR\* Group C - (8 credits): BY-109: Intro to Biodiversity and Evolution 4.0 BY-110: Intro to Cell & Molecular Biology 4.0 FREE ELECTIVES: 0 to 4 Credits Credits

(a) Minimum grade of "C" required for Education Courses

(b) Students must complete the appropriate test requirement(s) with a passing score PRIOR to Clinical Practice.

Catalog Year 2019-2020: MA.EDE.BS

# **MONMOUTH UNIVERSITY CURRICULUM CHART**

# Bachelor of Science in Mathematics and Education with Endorsement in Elementary Education

ENERAL EDUCATION REQUIREMENTS: 3	3 to 36 Credits	Credits
First Year Seminar	FY-101: First Year Seminar	3.0
Reading and Writing	EN-101: College Composition I EN-102: College Composition II	3.0 3.0
Mathematics	Fulfilled in Major Requirements with required MA courses	0.0
Natural Sciences	Fulfilled in Interdisciplinary with BY, CE, or PH courses	0.0
Literature	3 Credits from courses designated with Course*Type: LIT	3.0
Aesthetics and Creativity	3 Credits from subject MU, AR, TH, DA	3.0
Technological Literacy	3 Credits from courses designated with Course*Type: TL *May be fulfilled in Major Requirements with MA-237	0.0 - 3.0
Reasoned Oral Discourse	Fulfilled in Major Requirements with ED-320, and/or MA-314	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	3 Credits from courses designated with Course*Type: SS.SV	3.0
Historical Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV or 3 Credits from courses designated with Course*Type: SS.SV	3.0
Interdisciplinary Perspectives	3 Credits from courses designated with Course*Type: ISP	3.0
Cultural Diversity and Global Understanding Understanding or Foreign Language	3 Credits from courses designated with Course*Type: CD and 3 Credits from courses designated with Course*Type: GU or 6 Credits from the SAME foreign language	6.0
Experiential Education	One course designated with Course*Type: EX	0.0
Writing Intensive	Two courses from Mathematics (MA) designated with Course*Type: WT	0.0 0.0
	Two courses from Education (ED, EDL, EDS) designated with Course*Type: WT	0.0

Minimum Credits for Bachelor of Science in Mathematics and Education with Endorsement in Elementary Education = 128.0

### **ADDITIONAL ENDORSEMENTS AVAILABLE:**

• TSD - Teacher of Students with Disabilities - Elementary

• MID-MA - Middle School Mathematics

• ESL - English as a Second Language - Elementary

• P-3 Early Childhood Endorsement

## NOTES:

- \* 58 credits must be completed at the 200 level or higher.
- \*\* Education majors are required to have an overall GPA of 3.00 for State Certification.
- \*\*\*By state regulation, all Education Majors seeking content area endorsement must complete 30 content credits (12+ credits at the 300+ level).