2024 - 2025 Major Map

Secondary Education (Biological Sciences), BAE

School/College: Mary Lou Fulton Teachers College

TEBIOBAE

Ferm 1 0 - 17 Credit Hours Critical course signified by ◆	Hours	Minimum Grade	Notes
♦ BIO 181: General Biology I (SCIT OR SQ)	4	С	• ASU 101 or college-specific equivalent
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	С	First-Year Seminar required of all first-year students. • Join a student club or professional organization.
MAT 170: Precalculus (MATH OR MA)	3	С	
TEL 101: Professional Educator Series: The Student Experience	1		
TEL 111: Exploration of Education (HUAD OR SB)	3	С	
TEL 215: Introduction to Child and Adolescent Development (SOBE OR SB)	3	С	
Term hours subtotal:	17		
erm 2 17 - 31 Credit Hours Critical course signified by 💠	Hours	Minimum Grade	Notes
BIO 182: General Biology II (SCIT OR SG)	4	C	 Apply for an identify verified print (IVI)
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	С	 Apply for an identify verified print (IV fingerprint clearance card online. Your IVP fingerprint card will be need for professional classroom experiences Join a student club or professional organization.
TEL 171: Professional Educator Series: Equity in Education	1		
TEL 212: Understanding the Culturally Diverse Learner (HUAD OR HU & C)	3	C	
Global Communities, Societies and Individuals (GCSI)	3		
Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	14		
erm 3 31 - 45 Credit Hours Critical course signified by 💠	Hours	Minimum Grade	Notes
SPE 222: Orientation to Education of Exceptional Children (CIVI OR SB & C)	3	С	
BLE 220: Foundations of Structured English Immersion (HUAD OR L)	3	С	
CHM 113: General Chemistry I (SCIT OR SQ)	4	С	
GCU 113: United States and Arizona Social Studies (AMIT OR SB & H)	3		
TEL 270: Professional Educator Series: Connecting Research to Practice	1		
Complete Mathematics (MATH) requirement.			
Term hours subtotal:	14		
erm 4 45 - 59 Credit Hours Critical course signified by �	Hours	Minimum Grade	Notes

TEL 203: Collaborating, Planning and Implementing Instruction in Diverse Contexts	3	С	
CHM 116: General Chemistry II (SCIT OR SQ)	4	С	
EDT 180: Technology Literacy: Problem Solving using Digital Technology Applications (QTRS OR CS)	3	С	
TEL 271: Professional Educator Series: Inclusivity in Practice	1		
Sustainability (SUST) (SCN 202 or SCN 208 recommended)	3		
Term hours subtotal	: 14		
erm 5 59 - 74 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
TEL 310: Instructional Design and Planning: Instructional Thought and Action	4	С	 Students may take TEL 318 in an earlie term if their schedule allows. Please
BIO 201: Human Anatomy and Physiology I (SCIT OR SG) OR BIO 360: Animal Physiology OR PLB 308: Plant Physiology	3-4	С	term if their schedule allows. Please consult with an academic advisor first.
BIO 340: General Genetics OR LSC 347: Fundamentals of Genetics AND LSC 348: Fundamentals of Genetics Laboratory	4	С	
TEL 318: Instructional Thought and Action: Assessment for Learning	3	C	
TEL 370: Professional Educator Series: Building a Professional Network	1		
Term hours subtotal:			
erm 6 74 - 91 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
TEL 366: Internship: Intermediate	С	C • Students may choose content courses,	
			elective courses, or a specialization area
BIO 320: Fundamentals of Ecology OR BIO 345: Evolution	3	С	
BIO 320: Fundamentals of Ecology OR BIO 345: Evolution SED 482: Science Teaching Methods for Secondary Schools I			elective courses, or a specialization area which can be a certificate or personalized
	3	C C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management	3	C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor.
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies	3	C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses:	3 3	C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course	3 3 1 6	C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course Term hours subtotal:	3 3 1 6 17	C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice interview. Notes
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course Term hours subtotal:	3 3 1 6 17 Hours	C C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice interview. Notes • Students may choose content courses,
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course Term hours subtotal: Perm 7 91 - 108 Credit Hours Necessary course signified by TEL 332: Disciplinary Literacy Methods	3 3 1 6 17 Hours 4	C C Minimum Grade C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice interview. Notes • Students may choose content courses, elective courses, or a specialization area which can be a certificate or personalize interest area. Students select appropriate
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course Term hours subtotal: Perm 7 91 - 108 Credit Hours Necessary course signified by TEL 332: Disciplinary Literacy Methods SED 483: Science Teaching Methods for Secondary Schools II TEL 340: Families, Communities and Cultures: Cultivating	3 3 1 6 17 Hours 4 3	C C Minimum Grade C C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice interview. Notes • Students may choose content courses, elective courses, or a specialization area which can be a certificate or personalize
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course Term hours subtotal: Perm 7 91 - 108 Credit Hours Necessary course signified by TEL 332: Disciplinary Literacy Methods SED 483: Science Teaching Methods for Secondary Schools II TEL 340: Families, Communities and Cultures: Cultivating Networks of Culturally Responsive Relationships (SOBE OR SB) TEL 470: Professional Educator Series: Career Growth and	3 3 1 6 17 Hours 4 3	C C Minimum Grade C C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice interview. Notes • Students may choose content courses, elective courses, or a specialization area which can be a certificate or personalize interest area. Students select appropriate courses in consultation with their
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course Term hours subtotal: Perm 7 91 - 108 Credit Hours Necessary course signified by TEL 332: Disciplinary Literacy Methods SED 483: Science Teaching Methods for Secondary Schools II TEL 340: Families, Communities and Cultures: Cultivating Networks of Culturally Responsive Relationships (SOBE OR SB) TEL 470: Professional Educator Series: Career Growth and Planning Complete 2 courses:	3 3 1 6 17 Hours 4 3 1	C C Minimum Grade C C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice interview. Notes • Students may choose content courses, elective courses, or a specialization area which can be a certificate or personalize interest area. Students select appropriate courses in consultation with their
SED 482: Science Teaching Methods for Secondary Schools I TEL 317: Instructional Thought and Action: Learning Environment and Management TEL 371: Professional Educator Series: Educational Policies Complete 2 courses: Content, Elective, or Specialization Area Course Term hours subtotal: TEL 332: Disciplinary Literacy Methods SED 483: Science Teaching Methods for Secondary Schools II TEL 340: Families, Communities and Cultures: Cultivating Networks of Culturally Responsive Relationships (SOBE OR SB) TEL 470: Professional Educator Series: Career Growth and Planning Complete 2 courses: Content, Elective, or Specialization Area Course	3 3 1 6 17 Hours 4 3 1 6	C C Minimum Grade C C	elective courses, or a specialization area which can be a certificate or personalized interest area. Students select appropriate courses in consultation with their academ advisor. • Complete an in person or virtual practice interview. Notes • Students may choose content courses, elective courses, or a specialization area which can be a certificate or personalize interest area. Students select appropriate courses in consultation with their

Term hours subtotal:

12

Hide Course List(s)/Track Group(s)

- Total Hours: 120
- Upper Division Hours: 45 minimum
- University Undergraduate Graduation Requirements

Notes:

Mathematics Placement Assessment score determines placement in first mathematics course.

General Studies designations listed next to courses on the major map were valid for the 2024 - 2025 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.