DEGREE WORKSHEET FOR:
BS Mathematics: Middle School Teaching Emphasis
2024-2025 Catalog
Degree Requirements – 126 credits

YEAR 1- FALL (16 credits) 2024		YEAR 1- SPRING (16 credits) 2025	
ENG 122 College Composition (LAW1*)	3 credits	MATH 131 Calculus I (LAX1*)	4 credits
MATH 185 Number Sense and Algebra [f] (LAX1*)	3 credits	**MATH 283 Fundamental Mathematics III [s]**	3 credits
CS 120 Computer Programming	3 credits	ENG 225 Communications on a Theme (LAW2*)	3 credits
Liberal Arts Curriculum[a] (choose one LAA1, LAA2, LAA3, or LAA4 that is also a LAMS and/or LAIS)	3 credits	200 level Language Course[h] (CHIN, FR, GER, JAPN, SPAN) (LAA4*)	3 credits
Liberal Arts Curriculum[a] (LAH1*)	3 credits	MAS 100 Intro to Mexican American Studies **OR** MAS 110 Contemporary Chicano Literature (LAMS*)	3 credits
MATH 102 Success in Mathematical Sciences[b]	1 credit	*Application for Initial Admission to PTEP[c]*	
YEAR 2- FALL (18 credits) 2025		YEAR 2-SPRING (16 credits) 2026	
MATH 132 Calculus II (LAX1*)	4 credits	**MATH 391 Introduction to Number Theory[s]**	3 credits
MATH 286 Elements of Discrete Mathematics[f]	3 credits	**STAT 355 Introduction to Applied Statistics & Probability[e,s]**	3 credits
STEP 161 Observation and Analysis of Sec. Teaching[f]	2 credits	*ECLD 341 Content-Based Literacy for Equitable Access to PK-12 Instruction*	3 credits
EDF 290 Foundations of Education	3 credits	Liberal Arts Curriculum[a] (LAS1; LAS1L*)	4 credits
ECLD 260 Language Acquisition in Multilingual Societies [d]	3 credits	ECLD 380 Intro to Linguistics for CLD Educators	3 credits
MAS 275 Education of Mexican American Students **OR** WLC 390 History & Philosophy of Multilingual Education	3 credits		
YEAR 3- FALL (15 credits) 2026		YEAR 3- SPRING (17 credits) 2027	
MATH 386 Problem Solving[f]	3 credits	**MATH 317 Mathematical Foundations for Teachers[o,s]**	3 credits
MED 449 Teaching Mathematics with Technolog [e,f]	3 credits	*MED 341 Principles of Teaching Mathematics [s]*	3 credits
PSY 247 *Adolescent Learning and Motivation[f,g] (LAB3*)*	3 credits	**MATH 341 Introduction to Modern Geometry [s]**	3 credits
ECLD 400 Methods and Approaches of CLD[f]	3 credits	*STEP 262 Observation and Analysis of Sec. Teaching[s]*	2 credits
ECLD 401 CLD Practicum[f]	3 credits	*EDSE 360 Adaptations/Modifications & Integration*	3 credits
		Liberal Arts Curriculum[b] (choose one additional LAA, LAH or LAB*)	3 credits
Request for Phase II Placement [c]		*Application for Full Admission to PTEP[c]*	
YEAR 4- FALL (14 credits) 2027		YEAR 4- SPRING (14 credits) 2028	
MED 441 Methods of Teaching Mathematics [f]	3 credits	*STEP 464 Secondary Student Teaching*	14 credits
MATH 464 Introduction to History of Mathematics [o,f]	3 credits		
STEP 363 Clinical Experience- Secondary[f]	2 credits		
ET 449 Integrating Technologies into Sec Ed Pedagogy	3 credits		
Liberal Arts Curriculum[a] (LAS1)	3 credits		
Application for Student Teaching[c]			

[a] Liberal Arts Core courses can be taken any semester (see Note 1 on page 2)
[b] You need to complete 10 credits of University-wide Electives.
[c] PTEP Applications are due **early** in the semester; contact the Math Content Coordinator for specific dates.
[d] Satisfies requirements for Colorado ELL Educator Preparation Standard and counts as an LAC Multicultural Studies (LAMS)
[e] Course is only offered in even years
[o] Course is only offered in odd years
[f] Course is only offered in the fall semester
[s] Course is only offered in the spring semester
[g] PSY 349 Ed. Psychology for Secondary Teachers may be substituted (does not count as an LAC)

Notes-see page 2.

BS Mathematics: Middle School Teaching Emphasis (cont.)

Admission Requirement – See Professional Teacher Education Program (PTEP) section in current Catalog for admission requirements. Equivalent of four years of high school mathematics that will enable student to begin a study of calculus.
Minor Required – No Minor required.
Contact Information – Mathematical Sciences
    Ross Hall Room 2239, 970-351-2820
    School Web Page: http://www.unco.edu/nhs/mathematical-sciences/

This worksheet is a **recommended schedule** to complete your bachelor's degree in 4 years. Every UNC student must meet the following requirements to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; have at least 31 credit hours in courses designated as Liberal Arts Curriculum; meet all degree requirements in the student's major field of study. Each major and/or emphasis may have additional requirements necessary for graduation. **Students must consult with their major advisor to receive information on any additional graduation requirements.**

Notes

1   The coursework in the Liberal Arts Curriculum (LAC) should be evenly distributed over the entire course of study rather than concentrated in the first two years. **You need to complete a minimum of 31 LAC credits in Written Communication (6 credits), Mathematics (3 credits), Arts & Humanities, History, Social & Behavioral Sciences, U.S. Multicultural Studies, and International Studies (15 credits), and Natural & Physical Sciences (7 credits) according to your catalog description.** One writing course (ENG 122) has been pre-designated (3 credits); you must choose another writing course from LAC GT-CO2 (3 credits), but ENG 225 Communications on a Theme specifically offered for middle school/secondary majors is recommended. You are required to take a Natural & Physical Science course with a required lab (4 credits) and without a lab (3 credits). PSY 247 counts as a Social & Behavioral Sciences course (3 credits). The remaining LAC electives include: Arts & Humanities (6 credits), History (3 credits), plus 3 additional credits from any category. In order to complete the LAC with minimum credits, six total credits must be double counted as Multicultural Studies (3 credits) and International Studies (3 credits). Example courses that count as MS course are AFS 101, GNDR 101, MUS 150, SOC 221, and SOC 237 and as IS courses are a foreign language, ANT 110, MIND 180, and PHIL 126.

2   The BA Mathematics: Middle School Teaching Emphasis includes 10 credits of University-wide Electives, but these credits are satisfied with courses taken for the CLD endorsement. Taking MATH 102 adds one credit to the proscribed program. EDSE 325 is a recommended course for a University-wide Elective.

3   Courses in **bold** are required Mathematical Science courses.

4   Courses in *italics* are required PTEP courses.

5   Courses underlined are required for the CLD endorsement.

6   ECLD 401 includes a 90-hour practicum placement in a local school. Strongly encourage students reduce the credits this semester by taking an LAC course during the summer and/or interim winter term(s). Sometimes, ECLD 260 and ECLD 380 are offered during the summer term.

This program prepares students to teach mathematics, such as arithmetic, algebra, geometry, trigonometry, and mathematical analysis and application at the middle school level (grades 6-8). Graduates of this program are prepared and will be qualified for licensure to teach mathematics in grades 6-8 in the state of Colorado. The program also prepares students for graduate study in mathematics education.

*Liberal Arts Curriculum Course Indicators			
LAA1	Arts & Humanities: Arts & Expression	LAIS	International Studies
LAA2	Arts & Humanities: Literature & Humanities	LAMS	U.S. Multicultural Studies
LAA3	Arts & Humanities: Ways of Thinking	LAS1	Natural & Physical Sciences
LAA4	Arts & Humanities: World Languages	LASL	Natural & Physical Sciences LAB
LAB1	Social & Behavior Sciences: Economic or Political Systems	LAW1	Introductory Written Communication
LAB2	Social & Behavior Sciences: Geography	LAW2	Intermediate Written Communication
LAB3	Social & Behavior Sciences: Human Behavior, Culture or Social Frameworks	LAW3	Advanced Written Communication
LAH1	History	LAX1	Mathematics