



DEGREE WORKSHEET FOR:

BS Mathematics: Middle School Teaching Emphasis with CLD Endorsement

2022-2023 Catalog

YEAR 1- FALL (16 credits)	YEAR 1- SPRING (16 credits)
ENG 122 College Composition (LAW1*) 3 credits MATH 185 Number Sense and Algebra (LAX1*)^f 3 credits CS 120 Computer Programming 3 credits Liberal Arts Curriculum ^a (choose one LAA1, LAA2, LAA3, or LAA4 that is also a LAIS*) 3 credits Liberal Arts Curriculum ^a (LAH1*) 3 credits MATH 102 Success in Mathematical Sciences ^b 1 credit	MATH 131 Calculus I (LAX1*) 4 credits MATH 283 Fundamental Mathematics III 3 credits ENG 225 Communications on a Theme (LAW2*) 3 credits <u>200 level Language Course^h (CHIN, FR, GER, JAPN, SPAN) (LAA4*)</u> 3 credits <u>MAS 100 Intro to Mexican American Studies OR MAS 110 Contemporary Chicano Literature (LAMS*)</u> 3 credits <i>Application for Initial Admission to PTEP^c</i>
YEAR 2- FALL (15 credits)	YEAR 2-SPRING (15 credits)
MATH 132 Calculus II (LAX1*) 4 credits MATH 286 Elements of Discrete Mathematics^f 3 credits <i>STEP 161 Observation and Analysis of Sec. Teaching^f</i> 2 credits <i>EDF 366 Conceptions of Schooling</i> 3 credits <u>ECLD 340 Academic Lang/Literacy Devel Sec Content Area</u> 3 credits <u>MAS 275 Education of Mexican American Students OR WLC 390 History & Philosophy of Multilingual Education</u> 3 credits	MATH 341 Introduction to Modern Geometry 3 credits MATH 391 Introduction to Number Theory^s 3 credits STAT 355 Intro to Applied Statistics and Probability^s 3 credits <u>ECLD 360 Second Language Acquisition^d</u> 3 credits <u>ECLD 380 Intro to Linguistics for CLD Educators</u> 3 credits
YEAR 3- FALL (16 credits)	YEAR 3- SPRING (17 credits)
MATH 317 Mathematical Foundations for Teachers^f 3 credits MATH 386 Problem Solving^f 3 credits <u>ECLD 400 Methods and Approaches of CLD</u> 3 credits <u>ECLD 401 CLD Practicum</u> 3 credits Liberal Arts Curriculum ^a (LAS1; LAS1L*) 4 credits <i>Request for Phase II Placement^c</i>	MATH 464 Introduction to History of Mathematics^s 3 credits MED 341 Principles of Teaching Mathematics^s 3 credits <i>STEP 262 Observation and Analysis of Sec. Teaching^s</i> 2 credits <i>EDSE 360 Adaptations/Modifications & Integration</i> 3 credits <i>PSY 247 Adolescent Learning and Motivation^e (LAB3*)</i> 3 credits Liberal Arts Curriculum ^b (choose one additional LAA, LAH or LAB*) 3 credits <i>Application for Full Admission to PTEP^c</i>
YEAR 4- FALL (14 credits)	YEAR 4- SPRING (14 credits)
MED 441 Methods of Teaching Mathematics^f 3 credits MED 449 Teaching Mathematics with Technology^f 3 credits <i>STEP 363 Clinical Experience- Secondary^f</i> 2 credits <i>ET 449 Educational Technology Applications</i> 3 credits <i>Application for Student Teaching^c</i>	<i>STEP 464 Secondary Student Teaching</i> 14 credits

^a Liberal Arts Core courses can be taken any semester (see Note 1 on page 2)

^b You need to complete 7 credits of University-wide Electives (see Note 2 on page 2).

^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 Standards.

^e PSY 349 Ed. Psychology for Secondary Teachers may be substituted, it does not count as an LAC course

^f Course is only offered in the fall semester

^s Course is only offered in the spring semester

^h Course has prerequisites

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 – School of 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. 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 ASS 101, MUS 150, SOC 221 and SOC 237 and as IS courses are a foreign language, MIND 180, and PHIL 126.
- 2 The BA Mathematics: Middle School Teaching Emphasis includes 7 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.
- 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 EDSE 325 is a recommended course for a University-wide Elective.

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