



DEGREE WORKSHEET FOR:

BS Mathematics: Secondary Teaching Emphasis with CLD Endorsement

2022-2023 Catalog

Degree Requirements – 130 credits

YEAR 1- FALL (17 credits)	YEAR 1- SPRING (16 credits)
ENG 122 College Composition ^a (LAW1*) 3 credits	MATH 132 Calculus II (LAX1*) 4 credits
MATH 131 Calculus I (LAX1*) 4 credits	MATH 228 Discrete Mathematics 3 credits
CS 120 Computer Programming 3 credits	ENG 225 Communications on a Theme ^a (LAW2*) 3 credits
MATH 102 Success in Mathematical Sciences ^b 1 credit	<u>200 level Language Course (CHIN, FR, GER, JAPN, SPAN) ^h (LAA4*)</u> 3 credits
Liberal Arts Curriculum ^a (choose one LAA1, LAA2, LAA3, or LAA4 that is also a LAIS*) 3 credits	<u>MAS 100 Intro to Mexican American Studies OR</u> 3 credits
Liberal Arts Curriculum ^a (LAH1*) 3 credits	<u>MAS 110 Contemporary Chicano Literature (LAMS*)</u> <i>Application for Initial Admission to PTEP^c</i>
YEAR 2- FALL (18 credits)	YEAR 2-SPRING (16 credits)
MATH 233 Calculus III 4 credits	STAT 355 Introduction to Applied Statistics and Probability^s 3 credits
MATH 221 Elementary Linear Algebra 3 credits	MATH 341 Introduction to Modern Geometry 3 credits
<i>STEP 161 Observation and Analysis of Sec. Teaching^f</i> 2 credits	Liberal Arts Curriculum ^a (LAS1/LASL*) 4 credits
<i>EDF 366 Conceptions of Schooling</i> 3 credits	<u>ECLD 380 Intro to Linguistics for CLD Educators</u> 3 credits
<u>ECLD 340 Academic Lang/Literacy Devel Sec Content Area</u> 3 credits	<u>ECLD 360 Second Language Acquisition</u> 3 credits
<u>MAS 275 Education of Mexican American Students OR</u> 3 credits	
<u>WLC 390 History & Philosophy of Multilingual Education</u>	
⁶ YEAR 3- FALL (18 credits)	YEAR 3- SPRING (17 credits)
MATH 321 Introduction to Abstract Algebra ^f 3 credits	MATH 464 Introduction to History of Mathematics ^s 3 credits
MATHElective^e 3 credits	MED 341 Principles of Teaching Mathematics ^s 3 credits
MATHElective^e 3 credits	<i>STEP 262 Observation and Analysis of Sec. Teaching^s</i> 2 credits
Liberal Arts Curriculum ^a (LAS1*) 3 credits	<i>EDSE 360 Adaptations/Modifications & Integration</i> 3 credits
<u>ECLD 400 Methods and Approaches of CLD</u> 3 credits	<i>PSY 247 Adolescent Learning and Motivation^d (LAB*)</i> 3 credits
<u>ECLD 401 CLD Practicum</u> 3 credits	Liberal Arts Curriculum ^a (choose one additional LAA, LAH or LAB*) 3 credits
<i>Request for Phase II Placement^c</i>	<i>Application for Full Admission to PTEP^c</i>
YEAR 4- FALL (14 credits)	YEAR 4- SPRING (14 credits)
Math Elective^e 3 credits	<i>STEP 464 Secondary Student Teaching</i> 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>	

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

^b You need to complete 3 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 PSY 349 Ed. Psychology for Secondary Teachers may be substituted, it does not count as an LAC course.

^e Students choose 3 of the following 4 classes below. Note the classes are arranged by the semester they are offered.

^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 – Secondary Teaching Emphasis (cont.)

Math Elective Courses – Fall Semester	Math Elective Courses – Spring Semester
MATH 317 Mathematical Foundations for Teachers MATH 342 Introduction to Modern Geometry II MATH 437 Mathematical Modeling	MATH 322 Introduction to Abstract Algebra II

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 in order 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 4 years of study rather than concentrated in the first 2 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 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). These credits are satisfied with your selection of MAS 100 or MAS 110 and foreign language.
- 2 The BA Mathematics: Secondary Teaching Emphasis includes 3 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 Secondary PTEP courses.
- 5 Courses underlined are required for the CLD endorsement.
- 6 TESL 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).

This program prepares students to teach mathematics, such as arithmetic, algebra, geometry, trigonometry, and mathematical analysis and application at the secondary school level (grades 7-12). Graduates of this program are prepared and will be qualified for licensure to teach mathematics in grades 7-12 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