## Bachelor of Science in Mathematics

Teaching Licensure Concentration (Secondary Education 9-12) Freshman Curriculum Planning Guide and Degree Audit Worksheet Fayetteville State University
(2022-2023)

| University College Core Curriculum (General Education - 39 Credits) | Course Number | Cr. | Term | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Transitional Studies - University Studies (2 Credits) Select one option from (UNIV 101/102) or UNIV 110 or UNIV 111 or UNIV 112 |  | 2 |  |  |
| Transitional Studies - Life Skills (2 Credits) <br> Select two credits from the following: ENTR 100 or FINC 100 or GEOG 110 or HEED 112 or HEED 113 or PEDU 101 or PEDU 107 or PEDU 112 or PEDU 120 or PEDU 122 or PEDU 130 or PEDU 132 or PEDU 140 |  | 2 |  |  |
| Communication Skills - Written Communication (3 Credits) - ENGL 110 | ENG 110 | 3 |  |  |
| Information Literacy (3 Credits) - ENGL 120 | ENG 120 | 3 |  |  |
| Communication Skills - Oral Communication (3 Credits) BADM 215 or SPEE 200 | BADM 215 or SPEE 200 | 3 |  |  |
| Reasoning Skills - Critical Thinking (3 Credits) ${ }^{2}$ Select one from the following: PHIL 110 or PHIL 220 |  | 3 |  |  |
| Reasoning Skills - Quantitative Reasoning (3 Credits) ${ }^{3}$ <br> Select one from the following: MATH 129 and MATH 130 or MATH 131 | MATH 131 (or MATH 129 and MATH 130) | 3 |  |  |
| Scientific Literacy - Natural Sciences (8 Credits) ${ }^{4}$ |  | 4 |  |  |
| Select from the following: (BIOL 150 and BIOL 150L and BIOL 160 and BIOL 160L) or (CHEM 141 and CHEM 141L and CHEM 161 and CHEM 161L) or (PHYS 125 and PHYS 125L and PHYS 126 and PHYS 126L) |  | 4 |  |  |
| Scientific Literacy - Social Sciences (3 Credits) <br> CRJC 210 or ECON 211 or ECON 212 or ENEC 270 or GEOG 210 or HIST 212 or HIST 271 or POLI 200 or POLI 210 or POLI 220 or PSYC 210 or SOCI 210 |  | 3 |  |  |
| Humanities and Creative Arts (3 Credits) <br> Select one from the following: ART 210 or COMM 220 or ENGL 220 or ENGL 223 or ENGL 240 or ENGL 250 or ENGL 253 or HIST 210 or HUMN 211 or HUMN 212 or HUMN 213 or HUMN 215 or MUSI 210 or MUSI 225 or MUSI 260 or PHIL 210 or RELI 215 or THEA 203 |  | 3 |  |  |
| Global Literacy (3 Credits) ${ }^{5}$ <br> Select one from the following: ANTH 210 or ART 150 or ART 215 or BADM 210 or CHIN 110 or CHIN 120 or ENGL 211 or ENGL 212 or FREN 110 or FREN 120 or GEOG 220 or GLBL 200 or HIST 110 or HIST 120 or HIST 270 or PHIL 211 or POLI 230 or SOCI 150 or SPAN 110 or SPAN 112 or SPAN 120 or SPAN 122 or SPAN 211 or THEA 242 or YORU 110 or YORU 120 |  | 3 |  |  |
| Ethics and Civic Engagement (3 Credits) Select three credits from the following: EDUC 211 | EDUC 211 | 3 |  |  |

## Notes

1 UNIV 101-UNIV 102 required for all first-time students; UNIV 110 required for transfer students with fewer than 30 transfer credits. Students do not earn credit if requirement is waived. UNIV 111 may be required based on academic performance
2 Not required for students with 60+ transfer credits. Students do not earn credit if requirement is waived
3 MATH 121 may be required based on profile scores. Some core courses require a one-hour lab.
4 At least one natural science class must include its associated lab. Some majors require two lab sciences, increasing requirement to 8 credits
5 Not required for students with 30 or more transfer credits from a foreign institution. Students do not earn credit if requirement is waived.

| Mathematics Teaching Program Requirements (81 Credits) | Course | Cr. | Term | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Professional Education Courses (33 Credits) <br> EDUC 310 And EDUC 330 And EDUC 331 And EDUC 455 And EDUC 460 And EDUC 480 And EDUC 490 And READ 320 And SPED 320. (EDUC 455 And EDUC 460 And READ 320 may not be taken until student is admitted to Teacher Education. EDUC 480 and EDUC 490 may not be taken until student is admitted to Clinical Experience and are taken during the last and final semester) | EDUC 310 | 3 |  |  |
|  | EDUC 330 | 3 |  |  |
|  | EDUC 331 | 3 |  |  |
|  | SPED 320 | 3 |  |  |
|  | READ 320 | 3 |  |  |
|  | EDUC 455 | 3 |  |  |
|  | EDUC 460 | 3 |  |  |
|  | EDUC 480 | 11 |  |  |
|  | EDUC 490 | 1 |  |  |
| Mathematics Concentration (42 Credits) <br> MATH 142 And MATH 150 And MATH 241 And MATH 242 And MATH 251 And MATH 260 And MATH 262 MATH 312 And MATH 331 And MATH 361 And MATH 485 And Select any two 400-level MATH courses | MATH 142 | 4 |  |  |
|  | MATH 150 | 3 |  |  |
|  | MATH 241 | 4 |  |  |
|  | MATH 242 | 4 |  |  |
|  | MATH 251 | 3 |  |  |
|  | MATH 260 | 3 |  |  |
|  | MATH 262 | 3 |  |  |
|  | MATH 312 | 3 |  |  |
|  | MATH 331 | 3 |  |  |
|  | MATH 361 | 3 |  |  |
|  | MATH 485 | 3 |  |  |
|  | MATH 400 or higher | 3 |  |  |
|  | MATH 400 or higher | 3 |  |  |
| Other Course Requirements (6 Credits) STAT 301 And CSC 105 or higher CSC course | STAT 301 | 3 |  |  |
|  | CSC 105 or higher CSC course |  |  |  |
| Total Credits |  | 120 |  |  |
| Transfer Credits |  |  |  |  |

## Other Program Requirements

See Admission Requirements for Teacher Education majors on the College of Education catalog page. Student must fulfill all requirements for admission to Teacher Education.

1 A student must pass prerequisite courses with a grade of C or higher before enrolling in subsequent courses.
2 The mathematics major must complete a departmental comprehensive examination in the senior year.
3 Any student enrolled in a CSC or MATH course who does not meet the prerequisites for that course will be dropped.
4 Students must earn a grade of C or higher in all major courses and have a minimum GPA of 2.7.

## Four-Year Plan

This Plan illustrates how students can meet degree course requirements in four years. Some courses listed below may be taken in an alternate order. Courses fulfilling requirements are listed on the previous pages. For information about prerequisites and other program requirements, consult the appropriate Catalog Program of Study and an advisor. Students should work with advisor to create and update an individual plan in Degree Works.

| Year 1 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| University Studies | UNIV 101 | 1 |
| Written Communication | ENGL 110 | 3 |
| Life Skills |  | 2 |
| Critical Thinking |  | 3 |
| Quantitative Reasoning |  | 3 |
| Social Sciences |  | 3 |
| Total: |  | 15 |


| Year 1 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| University Studies | UNIV 102 | 1 |
| Information Literacy | ENGL 120 | 3 |
| Humanities and Creative Arts |  | 3 |
| Ethics and Civic Engagement | EDUC 211 | 3 |
| Calculus with Analytic Geometry I | MATH 142 | 4 |
| Discrete Mathematics | MATH 150 | 3 |
| Total: |  | 17 |


| Year 2 Fall |  | $\mathbf{C r}$ |
| :--- | :--- | :---: |
| Requirement | Course | 3 |
| Oral Communication |  | MATH 241 |
| Calculus with Analytic Geometry II | MATH 251 | 3 |
| Linear Algebra | MATH 262 | 3 |
| Modern Geometry | EDUC 310 | 3 |
| Foundations of Education | Total: |  | 16.


| Year 2 Spring |  | $\mathbf{C r}$ |
| :--- | :--- | :---: |
| Requirement | Course | 4 |
| Natural Sciences with lab |  | MATH 242 |
| Calculus with Analytic Geometry III | MATH 260 | 4 |
| Foundations of Mathematics | EDUC 330 | 3 |
| Educational Psych \& Human Development | SPED 320 | 3 |
| Education of the Exceptional Child | Total: |  | 17.17


| Year 3 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| MATH 400 or higher |  | 3 |
| Differential Equations I | MATH 331 | 3 |
| MATH 400 or higher |  | 3 |
| CSC 105 or higher | STAT 301 | 3 |
| Introduction to Probability | Total: | 15 |
|  |  |  |


| Year 3 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| History of Mathematics | MATH 312 | 3 |
| Teaching Secondary School Mathematics <br> Using Technology I | MATH 485 | 3 |
| Instructional Design and Assessment | EDUC 331 | 3 |
| Classroom Management \& Principles of <br> Secondary Education | EDUC 455 | 3 |
| Teaching Reading in the Content Areas | READ 320 | 3 |
| Total: |  | 15 |


| Year 4 Fall |  |  |
| :--- | :--- | :---: |
| Requirement | Course | Cr |
| Global Literacy |  | 3 |
| Natural Sciences with lab | MATH 361 | 3 |
| Introduction to Modern Algebra I | EDUC 460 | 3 |
| $\begin{array}{l}\text { Methods \& Materials in Secondary School } \\ \text { Subjects (Math) }\end{array}$ | Total: |  |$]$| 13 |
| :--- |


| Year 4 Spring |  |  |
| :--- | :--- | :---: |
| Requirement | Course | $\mathbf{C r}$ |
| Clinical Experience in the Secondary <br> School (Math) | EDUC 480 | 11 |
| Professional Seminar | EDCU 490 | 1 |
| Total: |  | 12 |

