

**KEENE STATE COLLEGE  
BACHELOR OF ARTS  
MATHEMATICS  
MIDDLE/JUNIOR HIGH CERTIFICATION OPTION**

It is the student's responsibility to follow the **official** requirements of their degree, which are found in the Keene State College catalog. This planning sheet is for advising purposes.

Name: \_\_\_\_\_ Student I.D.#: \_\_\_\_\_

Institution(s) Attended: \_\_\_\_\_ Credits: \_\_\_\_\_

\_\_\_\_\_ Update: \_\_\_\_\_ =

**1. GENERAL EDUCATION** 42 credits minimum

**A. English Language Competence:** ENG 101 is required of all students.

ENG 101: \_\_\_\_\_

**B. Arts & Humanities:** A minimum of five courses totaling at least 15 credits as follows:

One course in Literature \_\_\_\_\_

Any English course other than Eng 101, 202, 203, 204, 208, 301, 302, 303, 304, 308, 312.

FR, GER or SP 498 are appropriate when topics focus on French, German or Spanish literature.

U.S. HIST \_\_\_\_\_ ART, COMM, FILM, MU or TAD \_\_\_\_\_

Two additional courses from Arts & Humanities disciplines: AMST, ART, COMM, FILM, ENG, FR, GER, HIST, JRN, ML, MU, PHIL, SP, TAD or an approved interdisciplinary course (WS 201\* or an IDAH course).

\_\_\_\_\_

**C. Social Sciences:** A minimum of four courses totaling at least 12 credits in three or more of the Social Science disciplines: ECON, GEOG, POSC, PSYC, SOC or an approved interdisciplinary course (WS 201\* or an IDSS course).

GEOG \_\_\_\_\_

\_\_\_\_\_

**D. Sciences/Math:** A minimum of four courses totaling at least 12 credits as follows: One course in BIOLOGY. PHYS 241 and CS 140 are required for the major. One additional course from Sciences/Math disciplines: ASTR, BIO, CHEM, CS, ENST, GEOL, MATH, MET, PHYS or an approved interdisciplinary course (IDSM).

BIO \_\_\_\_\_ PHYS 241: UNIVERSITY PHYSICS I \_\_\_\_\_

CS 140: COMPUTER PROGRAMMING I \_\_\_\_\_

\* WS 201 may be used only once, to fulfill either an Arts & Humanities or Social Science General Education requirement.

**II. MAJOR REQUIREMENTS** 41 credits

**MATH CORE** 17 credits

|                                |        |   |        |
|--------------------------------|--------|---|--------|
| *MATH 141: Intro to Statistics | ___ 3_ | MATH 225: Intro to Abstract Mathematics | ___ 3_ |
| MATH 151: Calculus I           | ___ 4_ | MATH 231: Linear Algebra                | ___ 3_ |
| MATH 152: Calculus II          | ___ 4_ |   |        |

\*May be fulfilled by taking PSYC 251

**MIDDLE JUNIOR/HIGH SCHOOL MATH EDUCATION OPTION:** 24 credits

|                                       |        |
|---------------------------------------|--------|
| MATH 235: Discrete Mathematics        | ___ 3_ |
| MATH 275: Geometry for K-9 Teachers   | ___ 3_ |
| MATH 310: History of Mathematics      | ___ 3_ |
| MATH 371: Math Concepts Middle School | ___ 3_ |
| MATH 475: Issues & Trends in Math Ed  | ___ 3_ |

**At least one of the following:**

|                          |        |
|--------------------------|--------|
| MATH 320: Geometry       | ___ 3_ |
| MATH 331: Modern Algebra | ___ 3_ |
| MATH 337: Number Theory  | ___ 3_ |

**Two** Math Electives (minimum 6 credits) at the 200/300 level plus appropriate certification courses.

|      |         |        |
|------|---------|--------|
| MATH | : _____ | ___ 3_ |
| MATH | : _____ | ___ 3_ |

**III. ELECTIVES:**

Pick additional electives to bring your total credits up to 126 for the degree

If you wish to use transferred courses toward major/minor requirements you must use the course substitution process. Contact the Academic and Career Advising Center for more information.

**FOR TEACHER CERTIFICATION:**

In order to meet state standards, courses selected within the General Education requirements should include a U.S. history course and a geography course.

**Orientation**

ESEC 100: Introduction to Teaching \_\_\_ 1\_

**Learners**

\*\*ESEC 150: Development, Exceptionality and Learning I \_\_\_ 3\_

ESEC 250: Development, Exceptionality and Learning II \_\_\_ 3\_

**Fundamentals**

\*\*ESEC 282: Literacy in Content Areas \_\_\_ 3\_

**Settings**

ESEC 320: Ed. Environ. and Practices \_\_\_ 3\_

**Methodology**

ESEC 384: Methods: Middle School \_\_\_ 3\_

ESEC 386: Methods: Field Experience \_\_\_ 3\_

ESEC 450: Sem.: Educational Principles \_\_\_ 3\_

**Practice**

ESEC 460: Student Teaching \_\_\_ 12

**Pedagogy**

ESEC 387: Creating Social Contexts for Learning \_\_\_ 3\_

\*\*Courses designated with an asterisk require a minimum of one to three hours of field work in the schools or service learning.