

2006-2007 Catalog
Bachelor of Arts
MATHEMATICS
Elementary Option

KEENE STATE COLLEGE

Note: For advising support only.
See catalog for full degree requirements.

Name: _____ ID#: _____

GENERAL EDUCATION (minimum 43 credits)

ENGLISH LANGUAGE COMPETENCE: (4 credits)

- English 101-Essay Writing is required of all students.

Write in courses / credits:

ENG 101 _____ / 4

ARTS & HUMANITIES:

A minimum of ~~15~~ **12** credits, as follows:

- One course in Literature
(Any 200- or 300-level English course except 202, 203, 204, 208, 301, 302, 303, 304, 308, 312; FR 303 and SP 303 may also be used to fulfill this requirement)
- One course in History. (For teacher certification, a US History course is required)
- ~~One course in Art, Film, Music or Theatre & Dance.~~
- Additional credits from Arts & Humanities: AMST, ART, COMM, ENG, FILM, FR, GER, HIST, JRN, ML, MU, PHIL, SP, TAD or an approved interdisciplinary course (WS 201* or IDAH).
(For teacher certification in Elementary Education, an ART and a MUSIC course are required)

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SOCIAL SCIENCES:

A minimum of ~~12~~ **9** credits in **three or more Social Sciences disciplines**: ANTH, ECON, GEOG, POSC, PSYC, SOC or an approved interdisciplinary course (WS 201* or IDSS).
(For teacher certification, a Geography course is required)

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SCIENCES/MATHEMATICS:

A minimum of ~~12~~ **9** credits, as follows:

- One course in Biology.
- One course in Physical Science (ASTR, CHEM, GEOL, MET, PHYS)
- Additional credits from Sciences/Mathematics:
ASTR, BIO, CHEM, CS, ENST, GEOL, MATH, MET, PHYS or an approved interdisciplinary courses (IDSM).

_____ / _____

PHYS 241 _____ / _____

CS 140 _____ / _____

_____ / _____

(Physics 241-University Physics I and CS 140-Computer Programming I are required for the major; MATH 171-Structure of Number Systems and MATH 172-Application of Number Systems are required for the major and one may be used to fulfill a General Education requirement.)

*WS 201 may be used once, to fulfill either an Arts & Humanities or a Social Sciences requirement.

MAJOR REQUIREMENTS: See catalog for full degree and certification requirements.

NOTE: CS 140: Computer Programming I and PHYS 241: University Physics I are required for the major and may be applied Sciences/Mathematics General Education requirements.

MATH CORE REQUIREMENTS: 17 credits

- MATH 141: Introductory Statistics (can be fulfilled by taking PSYC 251: Psychological Statistics)
- MATH 151: Calculus I
- MATH 152: Calculus II
- MATH 225: Introduction to Abstract Mathematics
- MATH 231: Linear Algebra

ELEMENTARY MATHEMATICS EDUCATION OPTION: 24 credits

- MATH 235: Discrete Mathematics
- MATH 275: Geometry for K-9 Teachers
- MATH 310: History of Mathematics
- MATH 475: Issues and Trends in Math Education

Select at least one of the following:

- MATH 320: Geometry
- MATH 331: Modern Algebra
- MATH 337: Number Theory

Select three MATH electives at the 200/300 level (minimum 9 credits)

- MATH _____
- MATH _____
- MATH _____

ELEMENTARY TEACHER CERTIFICATION REQUIREMENTS: 37 credits

(See catalog for admission criteria and full certification requirements for Elementary Education.)

In order to meet state certification requirements, courses selected within the General Education requirements must include an Art course, a Music course, a US History course and a Geography course. MATH 171-Structure of Number Systems and MATH 172-Application of Number Systems are required for the Elementary Education major and one may be used to fulfill General Education requirements.

- ESEC 100: Introduction to Teaching
- ESEC 150: Development, Exceptionality, and Learning I
- ESEC 250: Development, Exceptionality, and Learning II
- ESEC 281: Emerging/Evolving Literacy
- ESEC 320: Educational Environments/Practices
- ESEC 383: Elementary Methods (K-8)
- ESEC 386: Methods: Field Experience
- ESEC 387: Creating Social Contexts for Learning
- ESEC 450: Seminar: Educational Principles
- ESEC 460: Student Teaching

ELECTIVES: Select additional courses of your choice to bring total number of credits earned to 120.