

## Mathematics - Pure/Applied Option: B.A. (120 cr)

### *INTEGRATIVE STUDIES PROGRAM REQUIREMENTS (44 cr)*

**Note:** Students must complete **Thinking & Writing** within their first two semesters and the **Quantitative Literacy** within their first three semesters.

#### Foundations

**ITW:** Thinking & Writing  \_\_\_\_\_

**IQL:** Quantitative Literacy  \_\_\_\_\_

#### Perspectives

**NOTE:** Students may take only **one** course in any specific discipline within the *PERSPECTIVES* area. Disciplines are shown in **BOLD**, such as **IAART**

**IA:** Arts, such as **IAART, IAMU, IATAD (1 course)**

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**IH:** Humanities such as **IHCOMM, IHENG, IHFILM, IHFR, IHGER, IHHIST, IHJRN, IHML, IHPHIL, IHSP (2 courses)**

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**IA/IH:** an additional course in either IA or IH **(1 course)**

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**IN:** Natural Sciences, such as **INASTR, INBIO, INCHEM, INGEOL, INMET, INPHYS (2 courses)**

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**IS:** Social Sciences, such as **ISANTH, ISCJS, ISECON, ISGEOG, ISPOSC, ISPSYC, ISSOC, ISSOSC (2 courses)**

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#### Interdisciplinary

**II:** Any course beginning with II **(1 course)**

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**NOTE:** Courses fulfilling *PERSPECTIVES* and *INTERDISCIPLINARY* requirements may be at the 100-400 level. All students must complete a minimum of **28** credits at the 100-200 level and a minimum of **8** credits at the 300-400 level to complete the *Integrative Studies Program (ISP)*.

## Keene State College

## 2008-2009 Catalog

### *MAJOR REQUIREMENTS (48 credits)*

#### **Core Courses (36 credits)**

CS 140 Computer Programming I

INPHYS 241 University Physics I\*

MATH 151 Calculus I

MATH 152 Calculus II

MATH 225 Introduction to Abstract and Discrete Mathematics

MATH 231 Linear Algebra and Differential Equations

MATH 241 Probability and Statistics I

MATH 300 Introduction to Algebra and Analysis

MATH 400 Capstone in Mathematics\*\*

*Select one course from the Pure Mathematics area (4 credits)*

MATH 320 Geometry (required for Secondary Teacher Certification)

**-or-**  MATH 337 Number Theory

**-or-**  MATH 490 Topics in Pure Mathematics

*Select one course from the Applied Mathematics area (4 credits)*

MATH 242 Applied Statistics

**-or-**  MATH 251 Vector Calculus

**-or-**  MATH 341 Probability and Statistics II

**-or-**  MATH 360 Numerical Methods

**-or-**  MATH 361 Differential Equations

**-or-**  MATH 365 Mathematical Modeling

**-or-**  MATH 495 Topics in Applied Mathematics

*Select one additional course at the 300/400 level (4 cr)*

*(excluding MATH 371, MATH 375, MATH 471, MATH 475)*

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*For teacher preparation in this major, refer to the Teacher Education section of the catalog for additional courses required for certification which may also be used to fulfill Integrative Studies Program requirements.*

\*Course may also be used to fulfill Integrative Studies requirements; credits count once.

\*\*Students seeking Secondary Mathematics teacher certification must take MATH 475 to fulfill this requirement (also see Secondary Education Certification Program Planning Sheet.)

See catalog for complete program requirements. This sheet is for general advising purposes only.