

# **MATHEMATICS: Pure/Applied/Secondary Option – B.A. (120 cr)**

Keene State College

2007-2008 Catalog

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

**Note:** Students must complete the **Thinking & Writing** requirement within their first two semesters and the **Quantitative Literacy** requirement 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 – IAART, IAMU, IATAD**

1 course:  \_\_\_\_\_

**IH: Humanities - IHCOMM, IHENG, IHFILM, IHFR, IHGER, IHHIST, IHJRN, IHML, IHPHIL, IHSP**

2 courses:  \_\_\_\_\_  \_\_\_\_\_

**IA/IH: 1 additional course in either IA or IH**

1 course:  \_\_\_\_\_

**IN: Natural Sciences – INASTR, INBIO, INCHEM, INGEOL, INMET, INPHYS**

2 courses:  \_\_\_\_\_  \_\_\_\_\_

**IS: Social Sciences – ISANTH, ISCJS, ISECON, ISGEOG, ISPOSC, ISPSYC, ISSOC, ISSOSC**

2 courses:  \_\_\_\_\_  \_\_\_\_\_

### **Interdisciplinary**

**II: Any course beginning with II**

1 course:  \_\_\_\_\_

**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)*.

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## **MAJOR REQUIREMENTS (48 cr)**

### **Core:**

CS 140 Computer Programming I  MATH 231 Linear Algebra & Differential Equations

INPHYS 241 University Physics I\*  MATH 241 Probability and Statistics

MATH 151 Calculus I\*\*  MATH 300 Algebra and Analysis

MATH 152 Calculus II  MATH 400 Mathematics Capstone\*\*\*

MATH 225 Introduction to Abstract & Discrete Mathematics

\***NOTE:** Course may be used to satisfy an Integrative Studies requirement; credits only count once.

\*\***NOTE:** MATH 151 will meet the IQL requirement.

\*\*\***NOTE:** Students seeking Secondary Math teacher certification must take MATH 475 to fulfill this requirement (also see Secondary Certification PPS).

### **Select ONE course from the pure area:**

MATH 320 Geometry\*  MATH 337 Number Theory  MATH 490 Topics in Pure Math

\***NOTE:** Students seeking Secondary Math teacher certification must take MATH 320 to meet this requirement.

### **Select ONE course from the applied area:**

MATH 242 Applied Statistics  MATH 360 Num. Methods  MATH 495 Topics in App. Math

MATH 251 Vector Calculus  MATH 361 Differential Eq.

MATH 341 Prob. & Stats II  MATH 365 Math. Modeling

### **ONE MATH course at the 300/400 level (excluding MATH 371, MATH 375, MATH 471, MATH 475)**

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