The Board of Study was created in natural and mathematical sciences to work for the improvement of science, technology, and mathematics (STM) teaching. Its intent is to supplement departmental efforts and to carry out functions and programs not within the interest of a single department or appropriately administered through one department.

Undergraduate-level subject-matter courses emphasizing the fundamental principles of the sciences and mathematics are scheduled by the Board of Study. Courses specifically designed for teachers at the elementary and secondary school levels are offered. Acceptability of natural science courses toward an undergraduate degree is determined in consultation with the student’s major advisor.

**Natural Sciences Courses**

**NAS 273 Investigation in the Physical Sciences** (A,L). Study of the fundamental aspects of physics and chemistry. Topics include Newton’s Laws of Motion, Chemical Reactions and Kinetics, Electricity, Magnetism, and Optics. Particular attention is paid to everyday phenomena which exhibit scientific principles. Laboratories use materials that are readily available. Three hours of lecture and two hours of laboratory per week. 4 Cr.

**NAS 371 Investigations in the Biological Sciences** (A). Provides an activity-oriented investigation of environmental concepts and problems and a basic ecological background for students with no previous background. 3 Cr.

**NAS 401 Computational Methods for Teachers I** (A). Prerequisite: Instructor’s permission. Enables teachers and teacher candidates in mathematical, physical, life, and earth sciences to learn computational tools, advanced graphing calculators, laptop computers, CD- and Web-based tools. Involves computational science as a process in solving real-world problems in sciences. Introduces technology tools (such as graphing calculators), math modeling tools (such as Excel, STELLA, and Geometer’s Sketchpad), agent-based modeling tools (such as AGENTSHEETS), science modeling tools (such as Interactive Physics). Includes a section on NY State K-12 standards in math, science and technology. 3 Cr.

**NAS 425 Peer Led Workshops for College Chemistry CHM 205/206** (A). Prerequisites: CHM 205 and CHM 206. Students receive training in peer leading workshop chemistry session averaging one hour per week before leading small groups of CHM 205/206 students in solving problems for two hours per week. Training includes pedagogical aspects, group dynamics, and chemistry content. Instructor’s permission required. 1 Cr.

**NAS 486 Laboratory Science Safety** (A). Prerequisites: Senior status, and an academic major in one of the natural sciences. Required for students in Secondary Science Certification programs. Describes lab teaching practices for students pursuing certification to teach science courses. Emphasizes lab hazard potential, especially when working with chemicals in biology, earth science/geology, physics and chemistry. Includes three hours of lecture/lab per week. 3 Cr.