APPENDIX B

Decisions regarding coursework in an academic major are based upon student’s academic record, performance on the Massachusetts Tests for Educator Licensure (MTEL), previous college coursework, or other related professional experience reflective of the student having met state and national standards.

### BIOLOGY, 8-12, LICENSURE

**ACADEMIC SUBJECT AREA COURSEWORK**

**Recommended course distribution:**

**Group A - Environmental**
- BOL0201 General Ecology

**Group B - Cellular/Molecular**
- BOL0203 Genetics I and one of the following:
  - BOL0205 Cell Biology (preferred), BOL0223 Microbiology

**Group C - Organismal**
- BOL0211 Plant Biology
- BOL0237 Human Anatomy & Physiology I
- BOL0230 Evolution
- CHEM0109 General Chemistry I
- CHEM0111 General Chemistry II
- BOL0289 Biology Seminar: History and Nature of Scientific Knowledge (1 cr)

### BUSINESS, 5-12, LICENSURE

**ACADEMIC SUBJECT AREA COURSEWORK**

**Business Core**
- MGMT0104 Principles of Accounting I
- MGMT0105 Principles of Accounting II
- MGMT0107 Software Application in Management
- MGMT0207 Financial Management
- MGMT0220 Production/Operations Management
- MGMT0221 Business Management
- MGMT0231 Marketing Management
- MGMT0241 Business Law
- MGMT0250 Quantitative Approach to Business Decisions
- MGMT0325 Business Policy and Strategy
- MGMT0338 International Business

**Non-Business Required Courses**
- ECON0101 Principles of Macroeconomics
- ECON0102 Principles of Microeconomics
- ENGL0103 Speech
- ENGL0392 Business and Technical Writing
- MATH0115 Math for Business and Social Science
- MATH0108 Elementary Statistics

**Concentration in Management**
- MGMT0301 Labor Relations
- MGMT0308 Organ Devel & Behavior
- MGMT0321 Management Info Systems
- MGMT03 300 level management elective
- MGMT03 300 level management elective

### CHEMISTRY, 8-12, LICENSURE

**ACADEMIC SUBJECT AREA COURSEWORK**

- MATH0105 Calculus I
- MATH0106 Calculus II
- PHYS0119 Physics I and Lab
- PHYS0121 Physics II and Lab
- CHEM0109 General Chemistry I with Lab
- CHEM0111 General Chemistry II with Lab
- CHEM0201 Organic Chemistry I with Lab
- CHEM0203 Organic Chemistry II with Lab
- CHEM0211 Advanced Inorganic Chemistry

- CHEM0305 Physical Chemistry
- CHEM0307 Physical Chemistry II with Lab
- CHEM0311 Instrumental Analysis with Lab
- CHEM0313 Biochemistry
- CHEM0350 Theoretical or Experimental Research
- CHEM0383 Senior Seminar in Chemistry(1cr)
- GNSC0239 Current Topics in Science Seminar
- GNSC0330 Science, Technology & Society

3 credits from approved advanced science courses