

MAT Middle Grades Natural Sciences/Chemistry Education Program Course of Study

| Required Education Courses | Clinical hours |
|---|----------------|
| EDUC 210 Observing the Schooling Process | 15 hours |
| EDUC 215 Instructional Communication: Theory & Practice | N/A |
| HIST 239 or PHIL 220 or SOAN 244 History or Philosophy or Anthropology of Education | N/A |
| PSYC 110 Introduction to Psychology | N/A |
| PSYC 210 Developmental Psychology | N/A |
| EDUC 413 Reading in the Content Areas | N/A |
| EDUC 415 Middle School Fieldwork & Seminar | 150 hours |
| EDUC 414 Inclusive Learning Environments | 15 hours |
| EDUC 519 Secondary Curriculum & Instructional Design | N/A |
| EDUC 520 Discipline Specific Secondary Instructional Design for Natural Sciences | 15 hours |
| EDUC 521 Secondary Student Teaching and Seminar | 560 hours |
| EDUC 501 Introduction to Teacher Research | N/A |
| EDUC 502 Action Research Project | N/A |
| Required Content Courses | |
| CHEM 115 Chemistry I | N/A |
| CHEM 116 Chemistry II | N/A |
| CHEM 220 Organic Chemistry I | N/A |
| CHEM 221 Organic Chemistry II | N/A |
| CHEM 320 Physical Chemistry I | N/A |
| CHEM 321 Physical Chemistry II | N/A |
| 300 Level CHEM Course (300/340/420/490) | N/A |
| CHEM 410 Senior Seminar or Senior Thesis | N/A |
| PHYS 110/120 Introductory Physics | N/A |
| PHYS 111/121 Introductory Physics | N/A |
| MATH 110 Calculus I | N/A |
| MATH 111 Calculus II | N/A |
| BIO 120 Organismal Biology | N/A |
| BIO 220 Ecology and Evolution | N/A |
| PHYS 109 Astronomy and Cosmology | N/A |

Note: a grade of "C" or better is required in all content courses. A grade of B- or better is required for all EDUC courses.

Middle Grades Natural Sciences/Chemistry Education Major Course Sequence and Program Assessment Checkpoints

