



## Science Education

(Biology, Chemistry, Earth Science, or Physics)

For those who do not hold a valid NYS Initial Teacher Certificate in *Biology, Chemistry, Earth Science, or Physics* (grades 7-12) and are seeking the Master of Education as well as a recommendation for the Initial Teacher Certificate in one of the above listed program areas (grades 7-12 with grades 5-6 extension) in which you are granted admission. Completion of this master's degree may also lead to a recommendation for the Professional Teacher Certificate (grades 7-12) and the Professional Extension in the same content area (grades 5-6). See GSE website for additional requirements.

Name: \_\_\_\_\_

Person Number: \_\_\_\_\_

### II. Initial and Professional Certification/Master of Education (Grades 7-12, 5-6 extension)

|                                                                                                                        | Date*        | Credit | Grade |
|------------------------------------------------------------------------------------------------------------------------|--------------|--------|-------|
| LAI 414/514 Adolescent Writing Across Curriculum **<br>(Formerly <i>Language, Cognition, and Writing</i> )             | Sum/Fall/Spr | 3      |       |
| LAI 552 Middle Childhood-Adolescent Literacy Methods                                                                   | Sum/Fall/Spr | 3      |       |
| CEP 400/501 Psychological Foundations of Education**                                                                   | Fall         | 3      |       |
| ELP 405/548/585 Foundations of Education**                                                                             | Fall         | 3      |       |
| LAI 619 Teaching Science in Grades 5-12                                                                                | Fall         | 3      |       |
| LAI 667 Field Experience                                                                                               | Fall         | 3      |       |
| LAI 698 Instructional Strategies in Secondary Schools                                                                  | Fall         | 3      |       |
| LAI 674 Seminar in Teaching                                                                                            | Spr          | 3      |       |
| LAI 668 Supervised Teaching I                                                                                          | Spr          | 3      |       |
| LAI 595 Supervised Teaching II                                                                                         | Spr          | 6      |       |
| MAJOR AREA REQUIREMENTS                                                                                                |              |        |       |
| LAI 531 Science Curricula: Current Approaches                                                                          |              | 3      |       |
| LAI 533 Science Instruction: Topics                                                                                    |              | 3      |       |
| LAI 534 Measurement and Evaluation in Science Instruction                                                              |              | 3      |       |
| LAI 603 Developing Curricula for Emerging Adolescents                                                                  |              | 3      |       |
| MAJOR AREA CONTENT ELECTIVES (Select 12 credits from the following)                                                    |              |        |       |
| LAI 525 Science, Technology, and Human Values                                                                          |              | 3      |       |
| LAI 528 Teaching Science in Context                                                                                    |              | 3      |       |
| LAI 530 Improving Elementary Science Education                                                                         |              | 3      |       |
| LAI 532 Technology and Science Education                                                                               |              | 3      |       |
| LAI 535 Environmental Education                                                                                        |              | 3      |       |
| LAI 637 Research in Science Education                                                                                  |              | 3      |       |
| LAI 639 History and Philosophy of Science for Science Teachers                                                         |              | 3      |       |
| Other electives with advisor approval                                                                                  |              | 3      |       |
| CAPSTONE EVENT (Select one of the following three options)                                                             |              |        |       |
| Comprehensive Exam                                                                                                     |              | 0      |       |
| LAI 700 Project OR LAI 701 Thesis<br>(May be substituted for credit hours within <i>Major Area Content Electives</i> ) |              | 3-6    |       |
| TOTAL CREDITS                                                                                                          |              | 57     |       |

\* Reflects past history of course offerings. Date of course offerings subject to change.

\*\* Undergraduate coursework (LAI 414, CEP 400, ELP 405) is only applicable if completed as a UB undergraduate student.

**Continued on next page**

## Science Education - Initial and Professional Certification/Master of Education (Grades 7-12, 5-6 extension)

Students who successfully complete the program will be awarded an Ed.M. degree from the University at Buffalo (successful completion includes individual program course grades of B- or higher and an overall GPA of at least 3.0; as well as successful completion of any applicable conditions of admission and/or any applicable conditions of continued enrollment; also see GSE Policies and Procedures for additional requirements).

Please note the following:

### GSE Application to Candidacy Form:

Upon successful completion of 42 to 45 credits in the Ed.M. program, submit a completed *GSE Application to Candidacy* form to LAI (505 Baldy Hall). The form must include your advisor's signature. The *Application to Candidacy* form can be found on the Graduate School of Education's website ([www.gse.buffalo.edu](http://www.gse.buffalo.edu)). The form is also available in the wall pockets outside of 505 Baldy Hall.

### Apply for Graduation via the HUB Student Center:

Notify the University of your expected conferral (graduation) date via the HUB Student Center. The "apply for graduation" link is on the "My Academics" tab.

| If you plan to graduate on:           | File your application via the HUB by: |
|---------------------------------------|---------------------------------------|
| Graduation Term: Spring (June 1)      | February 15                           |
| Graduation Term: Summer (September 1) | June 15                               |
| Graduation Term: Fall (February 1)    | September 15                          |

**Note:** Should you miss the above deadline, you will need to apply for the next conferral (graduation) date.

### Applying For Teacher Certification:

Program completion does not automatically lead to a University at Buffalo recommendation for the issuance of an initial teacher certificate, and a University at Buffalo recommendation does not automatically lead to the issuance of this certificate. To apply for an initial teacher certificate, you must meet the program requirements of the University at Buffalo (as specified within this document, as well as all applicable prerequisite distribution requirements and any other requirements specified at the point of admission or thereafter as a condition of continued enrollment) and the certification requirements of the New York State Education Department (such as the New York State Teacher Certification Exams and Fingerprint Clearance). For information about the certification application process, please contact the Teacher Education Institute (716-645-2461, <http://gse.buffalo.edu/tei>). Please note, completion of the program in which you are enrolled may only lead to a University at Buffalo recommendation for the issuance of an initial teacher certificate in the content area of this program; if you are applying for teacher certificates in other areas of certification, you should contact the New York State Education Department and/or the certification officer at your local BOCES. Additionally, please note that upon submitting a recommendation for the issuance of an initial teacher certificate, the Teacher Education Institute will simultaneously submit a recommendation for issuance of a professional teacher certificate (in the same certification area); however, the recommendation for the professional teacher certificate will remain 'in limbo' until you complete the application process for the professional teacher certificate and you have met all certification requirements of the New York State Education Department (such as the teaching experience).