

## **Emphasis - Chemistry**

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### **B.A.Ed. in Science Education Description**

The B.A.E. degree with a major in science education can be completed with an emphasis in biology, chemistry, or physics. The degree prepares graduates to be eligible for certification in Mississippi to teach one of these science subjects in grades 7-12. Graduates may also teach other subjects by gaining supplemental endorsements. (See an advisor for more information.)

### **Minimum Total Credit Hours: 122 General Education Requirements**

General Education Course Requirements: The core/general education requirements for the B.A.E. degree are as follows: 6 hours of English composition (Writ 100 or Writ 101 and Writ 102 or Liba 102); 6 hours of literature; 6 hours of history; college algebra or higher; a 3-4 hour biological science course with laboratory; a 3-4 hour physics, astronomy, or physical science II course with laboratory; a 3-4 hour course in geology, chemistry, or physical science I; a 3-hour course in fine arts (appreciation or history of); one additional 3-hour course in mathematics or science (Secondary Education majors and Special Education majors only); Psy 201 (Special Education and Secondary Education majors only); one additional 3-hour course in fine arts (Special Education majors only); 3 hours of humanities (from among classics, modern languages, philosophy, religion, literature, history, Southern studies, gender studies, linguistics, or African American studies) (Secondary Education and Special Education majors only); a 3-hour course in geography (Elementary Education majors only); a 3-hour course in sociology or political science (Elementary Education majors only).

Note: The core requirements are subject to change due to mandates from the Institutes of Higher Learning (IHL) and the Mississippi Department of Education. Therefore, it is important for all students to meet with School of Education advisers in the Student Advising and Field Experience office for the most recent information on the core.

### **Course Requirements**

In addition to completion of the core curriculum, the requirements for the B.A.E. in science education include the professional education courses shown below, plus the content courses and related area courses to satisfy an emphasis in biological science, chemistry, or physics.

Professional Education Courses (30 hours) Edsp 308, Edci 352, Edsp 327, Edci 353\*, Edse 400\*, Edse 446\*, Edle 480 \*, and Edci 419\*

(\*Admission to Phase II of the Teacher Education Program is required before taking these courses.)

Note: A minimum grade of C is required in all professional education courses, content courses, and related courses. If this minimum of C is not met, the course(s) must be retaken before enrolling in the next level of professional education courses.

### **Other Academic Requirements**

Admission to Phase II: Professional Education Core - Requirements for admission to teacher education are as follows:

1. Completion of core curriculum. Students responsible for submitting grades to the Office of the Dean for courses taken at other institutions. \*Music education majors must complete the 45 hours from the liberal arts general education core and Mus 301, 302, 305, and 311.
  2. Applicants who apply for admission to Phase II must have a 2.75 grade-point average.
  3. Passing scores on the Praxis 1: Pre-Professional Skills Tests (PPST) or SAT or ACT scores (see below).
- PPST Scores Required: Reading—170 Writing—172 Math—169
  - Exemption: Students who provide proof of SAT scores of at least 860 or ACT scores of at least a 21 overall composite with no scores lower than 18 in the other 4 subject areas are exempt from taking the Praxis I. (ACT or SAT scores must be from tests taken prior to admission to a college or university).
4. Courses Edci 352, Edsp 308, and Edsp 327 are the only professional education courses that may be taken prior to admission to Phase II. Elementary education majors may also take Edrd 355. A minimum grade of "C" in all professional education courses is required.

Note: A minimum grade of "C" is expected in all professional education courses, content courses, and related courses. If this minimum of "C" is not met, the course(s) must be retaken before enrolling in the next level of professional education courses.

Admission to Phase III: Student Teaching—Applications are available through the Student Advising and Field Experience Office and are due the semester prior to student teaching.

To be admitted to student teaching, a student must meet the following requirements:

1. Admission to the Teacher Education Program.
2. A minimum grade of "C" in all professional education courses, content courses and related courses with the exception of those required during student teaching. If this minimum of "C" is not met, the course(s) must be retaken before enrolling in the next level of professional education courses.
3. During the student teaching semester, students must register for student teaching and EDCI 419 Effective Classroom Management and Assessment Practices. In addition, one 3-hour elective may be taken.
4. Completion of 15 hours in residency at The University of Mississippi (includes Tupelo, Booneville, Grenada, and DeSoto campuses).
5. Correspondence courses in education are not accepted.
6. Evidence of professional liability insurance.

### **Emphasis - Chemistry Description**

Graduates in science education with an emphasis in chemistry are eligible for certification in Mississippi to teach in grades 7-12. Graduates may also teach



other subjects by gaining supplemental endorsements. (See an advisor for more information.)

## Course Requirements

In addition to completion of the core curriculum, the B.A.E. in science education with an emphasis in chemistry requires the professional education courses (30 hours) plus the following content area, related areas, and electives to reach a minimum of 123 semester hours.

Content Area Courses (33 hours) Chem 105/115; 106/116; 221/225; 222/226; 314; 331 or 334; 351; 381; and 382

Related Areas (19 hours total): Bisc 160/161 (4 hours) Phys 213/223 (3 hours) Phys 214/224 (3 hours) Astr/Geol (6 hours) Math 261 (3 hours)

## Degree Requirements

The academic regulations for this degree program, as entered in the University of Mississippi Catalog, are in effect for the current or selected academic year and semester. The University of Mississippi reserves the right to 1) change or withdraw courses; 2) change rules for registration, instruction, and graduation; and 3) change other regulations affecting the student body at any time.

## B.A.Ed. in Science Education

### General Education

| REQUIREMENT                     | HOURS | DESCRIPTION  |
|---------------------------------|-------|--|
| First Year Writing I            | 3     | Complete <a href="#">Hon 101</a> , <a href="#">Writ 100</a> or <a href="#">Writ 101</a> with a passing grade.  |
| First Year Writing II           | 3     | Complete one of the following courses with a passing grade: <a href="#">Liba 102</a> , <a href="#">Writ 102</a> or <a href="#">Hon 102</a> .   |
| 6 hrs history                   | 6     | Complete 6 hours of History coursework with a passing grade.   |
| 3 hrs math 121+                 | 3     | Complete a mathematics course ( <a href="#">Math 121</a> or higher) with a passing grade. Does not include <a href="#">Math 245</a> or <a href="#">Math 246</a> .  |
| Physical science                | 3     | Successfully complete 3-4 hour course with laboratory in physics, astronomy, or physical science II.   |
| Physical sci lab                | 1     | Complete a physical science lab to accompany physical science course.  |
| Biological science              | 3     | Successfully complete a biological science course with an accompanying lab.  |
| Biological sci lab              | 1     | Complete a biological science lab to accompany biological science course.  |
| 3-4 hrs science                 | 3     | Complete a 3-4 hours course in geology, chemistry, or physical science I.  |
| 6 hrs literature 200+           | 6     | Complete 6 credit hours of literature at the 200 level or higher.  |
| 3 hrs fine arts, apprec or hist | 3     | Successfully complete 3 hours in the fine or performing arts. The course may be chosen from art history, music, dance, and theatre arts. Studio and workshop courses cannot be used to satisfy this requirement. |

### General Education II

| REQUIREMENT             | HOURS | DESCRIPTION   |
|-------------------------|-------|---|
| <a href="#">Psy 201</a> | 3     | Complete <a href="#">Psy 201</a> with a passing grade.  |
| Add'l math/science      | 3     | Successfully complete an additional 3-hour course in mathematics or science.  |
| 3 hrs humanities        | 3     | Successfully complete 3 semester hours in courses chosen from the following areas: classics, modern languages, philosophy, religion, literature, history, southern studies, gender studies, linguistics, or African American studies. |

### Major Requirements

| REQUIREMENT                      | HOURS | DESCRIPTION  |
|----------------------------------|-------|--|
| <a href="#">Edsp 308</a> - C min | 3     | Complete <a href="#">Edsp 308</a> with a grade of C or better.       |
| <a href="#">Edci 352</a> - C min | 2     | Complete <a href="#">Edci 352</a> with a grade of C or better.       |
| <a href="#">EDSP 327</a>         | 3     | Complete <a href="#">EDSP 327</a> with a grade of C or better.       |
| <a href="#">Edci 353</a> - C min | 3     | Complete <a href="#">Edci 353</a> with a grade of C or better.       |
| <a href="#">Edse 400</a> - C min | 3     | Complete <a href="#">Edse 400</a> with a grade of C or better.       |
| <a href="#">Edse 446</a> - C min | 3     | Complete <a href="#">Edse 446</a> with a grade of C or better.       |
| <a href="#">Edle 480</a> - C min | 9     | Complete <a href="#">Edle 480</a> with a grade of C or better.       |
| <a href="#">Edci 419</a> - C min | 3     | Complete <a href="#">Edci 419</a> with a grade of C or better.       |
| Select an emphasis               |       | Select an emphasis area within the BAE in Science Education program. |

### Emphasis - Chemistry

| REQUIREMENT                      | HOURS | DESCRIPTION  |
|----------------------------------|-------|--|
| <a href="#">Bisc 160</a> - C min | 3     | Complete <a href="#">Bisc 160</a> with a grade of C or better. |



| REQUIREMENT   | HOURS | DESCRIPTION   |
|---|-------|---|
| <a href="#">Bisc 161</a> - C min                        | 1     | Complete <a href="#">Bisc 161</a> with a grade of C or better.  |
| <a href="#">Chem 105</a> - C min                        | 3     | Complete <a href="#">Chem 105</a> with a grade of C or better.  |
| <a href="#">Chem 106</a> - C min                        | 3     | Complete <a href="#">Chem 106</a> with a grade of C or better.  |
| <a href="#">Chem 115</a> - C min                        | 1     | Complete <a href="#">Chem 115</a> with a grade of C or better.  |
| <a href="#">Chem 116</a> - C min                        | 1     | Complete <a href="#">Chem 116</a> with a grade of C or better.  |
| <a href="#">Chem 221</a> - C min                        | 3     | Complete <a href="#">Chem 221</a> with a grade of C or better.  |
| <a href="#">Chem 222</a> - C min                        | 3     | Complete <a href="#">Chem 222</a> with a grade of C or better.  |
| <a href="#">Chem 225</a> - C min                        | 1     | Complete <a href="#">Chem 225</a> with a grade of C or better.  |
| <a href="#">Chem 226</a> - C min                        | 1     | Complete <a href="#">Chem 226</a> with a grade of C or better.  |
| <a href="#">Chem 314</a> - C min                        | 4     | Complete <a href="#">Chem 314</a> with a grade of C or better.  |
| <a href="#">Chem 331</a> or <a href="#">334</a> - C min | 3     | Complete one of the following courses with a grade of C or better: <a href="#">Chem 331</a> or <a href="#">Chem 334</a> . |
| <a href="#">Chem 351</a> - C min                        | 3     | Complete <a href="#">Chem 351</a> with a grade of C or better.  |
| <a href="#">Chem 382</a> - C min                        | 4     | Complete <a href="#">Chem 382</a> with a grade of C or better.  |
| <a href="#">Chem 381</a> - C min                        | 4     | Complete <a href="#">Chem 381</a> with a grade of C or better.  |
| <a href="#">Phys 224</a> - C min                        | 1     | Complete <a href="#">Phys 224</a> with a grade of C or better.  |
| <a href="#">Phys 214</a> - C min                        | 3     | Complete <a href="#">Phys 214</a> with a grade of C or better.  |
| <a href="#">Phys 223</a> - C min                        | 1     | Complete <a href="#">Phys 223</a> with a grade of C or better.  |
| <a href="#">Phys 213</a> - C min                        | 3     | Complete <a href="#">Phys 213</a> with a grade of C or better.  |
| <a href="#">Math 261</a> - C min                        | 3     | Complete <a href="#">Math 261</a> with a grade of C or better.  |
| 6 hrs astronomy/geology - C min                         | 6     | Complete 6 hours of Astr or Geol coursework with a grade of C or better.  |

