



Post Baccalaureate Teacher Certification Earth Science – Unified (9-12)

revised 8/23/2011

Career Preparation

Missouri State University's Education Program, the largest and only one of its kind in Missouri, provides experiences that prepare students to become effective teachers. A comprehensive field-based component is part of this exciting program. Teachers who have completed a Missouri State University (MSU) Education program are generally considered to be highly qualified, successful classroom teachers. High-need areas currently include: Special Education, Math, Science, and Foreign Language. Post-Baccalaureate students who have had significant experience either in the classroom or with children are often considered more qualified and are frequently hired before those without the experience.

Academic Program

The Post-Baccalaureate (Post-Bac) Education programs require satisfactory completion of competencies outlined by the Department of Elementary and Secondary Education (DESE). MSU offers several alternative routes to teacher certification which include: Post-Baccalaureate, Masters, and Provisional certification. All programs rely on coursework completed within an initial Bachelor's degree. Professional Education courses are sequenced to provide both study in the university setting and practical experience in classrooms.

Courses

Students pursuing Post-Bac Teacher Certification at Missouri State need to submit original official transcripts from all universities, colleges, and institutions previously attended. Prior coursework will be evaluated and credit will be granted and applied for all equivalent certification requirements.

An Individualized Program of Study (IPS) will be provided to the student. The IPS is reviewed during an advising session. If a course was not initially determined to be equivalent, but may have provided the competencies required for certification, the student may submit a course description/syllabus for re-evaluation.

Faculty and Staff Support

The Teacher Certification and several faculty offices are located in Hill Hall. Faculty members are actively involved in teaching, research, and service activities at the local, state, and national levels. While faculty may informally advise students, the Teacher Certification Advisement staff will provide the support and official advisement for all Post-Bac students pursuing teacher certification.

Facilities

Missouri State University is fortunate to have Greenwood Laboratory School located on campus. Greenwood, a K-12 facility, provides students in the College of Education with first-hand experience in observing and working with students. The technology labs, located in Hill Hall, have the most recent innovations in instructional technology and are available for use by Education students.

Special Services

The University and the College of Education are committed to the success of each student. Career Services, in cooperation with the College of Education, takes an active role in assisting Education students by providing information about teaching opportunities. Students are encouraged to meet with Career Services for job search assistance.

For More Information

Teacher Certification Office
Missouri State University
901 S. National Ave.
Springfield, MO 65897
Office: 417-836-8772 Fax: 417-836-5008
email: teachercertification@missouristate.edu
www.missouristate.edu/certification

Special Requirements

Course #	Title	Credits
COM115	Fundamentals of Public Speaking	3 hours
PSY121	Introductory Psychology	3 hours
CIS101 or CSC101	Computers for Learning	2 hours
		Total 8 hours

Professional Education

Course #	Title	Credits
EDC150	Introduction to Teaching	1 hour
SCI214	Introduction to Science Teaching in the 21 st Century	1 hour
SEC302	General Methods of Instruction in the Middle and Secondary Schools	4 hours
EDT365 or EDT662	Instructional Apps/Technology and Media Educational Applications of Computers for Teachers	3 hours
SCI314	Techniques and Technology in Science Laboratory Teaching	3 hours
PSY360 or PSY710	Educational Psychology Psychology of Education	3 hours
SPE340	Educational Alternatives for Exceptional Students	2 hours
RDG474	Reading and Writing in the Content Fields	2 hours
EDC350	School and Society	3 hours
SCI414	Teaching of Secondary School Natural Sciences	3 hours
SCI493	Supervised Teaching	6 hours
SCI494	Supervised Teaching	6 hours
		Total 37 hours

Middle School (5 – 9) Option

MID421 or MID810	Philosophy and Organization of Middle School Curriculum The Middle School – The Jr. High School	2-3 hours
MID439 or MID725	Middle School Instructional Strategies Advanced Theory and Practice in the Teaching of Early Adolescents	3 hours
MID425	Middle School Curriculum	2 hours
RDG318	Foundations of Reading Instruction	3 hours
EEM305	Field Experience in Education	2 hours
		Total 12-13 hours

Praxis II Test # 0571 required

Content Area

Course #	Title	Credits
<u>History and Philosophy of Science and Technology</u>		
SCI505	Intellectual Foundations of Science and Technology	3 hours
<u>Biology</u>		
BIO121	General Biology I	4 hours
BIO122	General Biology II	4 hours
<u>Chemistry</u>		
CHM160	General Chemistry I	4 hours
CHM161	General Chemistry I Lab	1 hour
CHM170	General Chemistry II	3 hours
CHM171	General Chemistry Lab	1 hour
<u>Physics</u>		
PHY123	Introduction to Physics I	8 hours
PHY124	Introduction to Physics II	
PHY203	Foundations of Physics I	
PHY204	Foundations of Physics II	
<u>Earth Science and Meteorology</u>		
GLG110	Principles of Geology	4 hours
GRY135	Principles of Weather and Climate	4 hours
<u>Environmental Sciences</u>		
GLG318	Physical Oceanography	3 hours
GRY348	Geomorphology	3 hours
GRY351	Conservation of Natural Resources	3 hours
<u>Geology/Physical Geography</u>		
GRY348	Geomorphology	<i>(repeated from above)</i>
GLG412	Field Geology of the Mid-Continental Region	4 hours
<u>Elective Requirement</u>		
Add at least 3 hours of GLG electives numbered 171 or higher.		
<u>Paleontology</u>		
GLG314	Historical Geology	4 hours
GRY348	Geomorphology	<i>(repeated from above)</i>
<u>Astronomy</u>		
AST115	Basic Astronomy	4 hours
<u>Oceanography</u>		
GLG318	Physical Oceanography	<i>(repeated from above)</i>
<u>Meteorology</u>		
GRY135	Principles of Weather and Climate	4 hours
<u>Math Requirement</u>		
MTH135	College Algebra	5-6-hours
MTH181	Trigonometry	
<i>Or Choose One From the Following:</i>		
MTH138	Pre-Calculus Mathematics	
MTH261	Analytic Geometry and Calculus I	
MTH287	Computational Calculus with Analytic Geometry I	
		Total 65-66 hours