



NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): Missouri Southern State University

Program Title: Geography

Degree/Certificate: Bachelor of Science in Geography; Bachelor of Art in Geography

Options: none

Delivery Site(s): MSSU Campus --- 3950 E. Newman Road Joplin, MO 64801

CIP Classification: 45.0701

*CIP code can be cross-referenced with programs offered in your region on MDHE's program inventory highered.mo.gov/ProgramInventory/search.jsp

Implementation Date: Fall 2016

Cooperative Partners: none

*If this is a collaborative program, form CL must be included with this proposal

AUTHORIZATION:

Dr. Alan Marble, President		7-1-15
_____ Name/Title of Institutional Officer	_____ Signature	_____ Date

Dr. Wendy McGrane, Interim Associate VPAA and Vice-Provost	417-625-9801
_____ Person to Contact for More Information	_____ Telephone

Missouri Southern State University

Bachelor of Science/Art in Geography

Duplication and Collaboration

There are only four public universities in Missouri that offer undergraduate degree programs in geography. The majority of these programs are in central or west-central Missouri (University of Missouri – Columbia, University of Missouri – Kansas City, and Northwest Missouri State University). The closest institution in Missouri offering a program in geography is Missouri State University in Springfield, approximately 70 miles away.

The establishment of a new program at Missouri Southern will not be a duplication as the student population served by Missouri Southern is demographically distinct from the population served by Missouri State University. Our student body is made up of a large fraction of commuter and nontraditional students who are more likely to go to a neighboring school in a nearby state than commute to Springfield.

While there is obviously some duplication with other programs in terms of content, we do not believe that there is duplication in service area. Each year we are aware of students who take geography classes at Missouri Southern that ultimately transfer to a neighboring institution in Kansas or, to a lesser extent, Arkansas in order to finish the geography degree.



STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	3	6	8	12	15
Part Time	1	2	2	2	2
Total	4	8	10	14	17

Please provide a rationale regarding how student enrollment projections were calculated:

There are usually about 120-140 students who take at least one geography course in a general education setting at Missouri Southern each semester. In recent years enrollment in these courses has increased, thus necessitating hiring additional faculty in the discipline. Each year usually one or two students inquire about majoring in geography. Assuming approximately 1-1.5% of total enrollment in general education classes would result in students who would declare a major, we conservatively estimate 2 students in year one. Once the program is fully implemented we believe that number would double and then increase steadily at about a rate of one-third annually. Additionally, we estimate that about a third to a quarter of students at any one time will be part-time students. These projections are reflective of both the proposed B.S. and B.A. programs combined.

Provide a rationale for proposing this program, including evidence of market demand and societal need supported by research:

Rationale for Program:

With only four other institutions in the State of Missouri that offer undergraduate degrees in geography, but with documented growth in the area, there is ample room to offer new undergraduate programs in this area. The faculty and facilities already exist at Missouri Southern

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to offer these programs at no additional cost to the University. The program mission and goals, in addition to the student enrollment projections, costs analysis, and interdisciplinary program structure support offering geography as new Bachelor of Science and Bachelor of Arts degrees at Missouri Southern.

The Geography Program, in its current incarnation, exists as an undergraduate minor and supports Missouri Southern's general education curriculum as well as curriculum in other areas such as sociology, political sciences, international studies, and teacher education.

In addition, the Geography Program as a minor, presently provides students with a distinctive curriculum whose focus is on the spatial location and distribution of social and environmental phenomena. As such, the Program integrates the physical and social sciences. In addition, the Program advances these goals by introducing students to important social science and geographical methods used to model social-environmental interaction. This is the only program at Missouri Southern that works to maintain a judicious integration of the physical and social sciences.

Overall, the Geography Program's mission is to provide high quality learning experiences for undergraduate students, maintain research productivity in concert with the teacher-scholar model used at MSSU, develop successful relationships with other institutions of higher learning that leverage our expertise with that of our institutional partners in the State of Missouri, and to provide services to state and local stakeholders through a combination of consulting and student internships. We believe this mission can best be accomplished by the addition of undergraduate Bachelor of Science and Bachelor of Arts degrees in geography.

The addition of undergraduate majors in geography to Missouri Southern's campus will support the Geography Program's efforts to take advantage of the growing employment market in geo-spatial technology. It incorporates both geo-spatial analysis (GIS) and statistical analysis to provide students with an exposure to a growing aspect of the field and area of high potential job growth in the future. Accordingly, the Geography Program has worked successfully in the past with other departments, in particular Biology and Environmental Health and Chemical and Physical Sciences, in order to provide students across campus access to learning experiences in geo-spatial technology. One goal of the Program is to strengthen, maintain, and expand relationships with other academic units through student exposure to course work in those other areas by incorporating cognate courses into the degree.

As such the Program is very well situated to move from offering a minor only to offering a major in Geography. The documentation throughout will show that there is both student demand, as

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Form SE - Student Enrollment Projections



well as workplace demand for geography majors. Also, as the supporting documentation shows, this program can be offered to stakeholders for no additional cost to the institution.

Market Demand and Societal Need:

The discipline of geography is one that has robust potential as a future growth area for full-time employment. There are two major areas where evidence of this upward trend may be found. The first is in the area of education, both secondary and in higher education. The second area is in the growth of geospatial technologies. In both areas there exist evidence for the current advancement and the future need for more opportunities for students to study geography. With respect to the growth in education at the secondary level, more and more schools are teaching human geography as an AP subject. In fact, AP Human Geography is among the fastest growing AP subjects taught in high schools

(http://apcentral.collegeboard.com/apc/members/courses/teachers_corner/220797.html, accessed May 29, 2015). The spin-off effect of this is that we are now see incoming college students who have taken geography in high school and who are interested in taking more of it in college. This has contributed to an increased demand for geography on college campuses nationwide, as well as at Missouri Southern.

In addition to the educational justification there is the rather impressive job growth potential. The Bureau of Labor Statistics (BLS) provides some useful data. The demand for geographers is expected to grow by 29%, putting it in the “much faster than average” category.

(<http://www.bls.gov/ooh/life-physical-and-social-science/geographers.htm> (accessed June 1, 2015) Also, the Missouri Department of Economic Development’s Occupational Projections for 2013-2015 (short term) and 2012-2022 (long term) supplied by the Missouri Economic Research and Information Center supports the findings posted by the US Bureau of Labor Statistics by putting geographers in the “Grade A” category for job growth, and anticipating a 24% long-term occupational growth rate and lists geographers a core STEM area.

(http://www.missourieconomy.org/occupations/occ_proj.stm accessed June 1, 2015)

Simply put, every city, county, and state government will have a need for geographic information systems (GIS) data managers. This is a field that is growing and will continue to grow in the future. Providing additional educational opportunities in geography helps support labor market demand and, thus, provides for an important societal need.

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Form SE - Student Enrollment Projections



A. Total credits required for graduation: 124 for the B.S. in Geography

B. Residency requirements, if any: The following requirements must be in residence at Missouri Southern: (1) 30 of the last 36 hours counted toward the degree; (2) one-half of the credit both required for the major and in the major department (Courses required for the major but not offered in the major department are not included); (3) one-half of the upper division credit both required for the major and for the major department

C. General education: Total credits: 46-47

Courses (specific courses OR distribution area and credits):

Course Number	Credits	Course Title
	6	Written Communication
	3	Oral Communication
	3	Mathematics
	8-9	Life and Physical Sciences
	12	Social and Behavioral Sciences
	6	Humanities and Fine Arts
	2	Health and Wellness
	3	University Experience
	3	Institutional Requirement
Total	46-47	

D. Major requirements: Total credits: 48

Course Number	Credits	Course Title
GEOG 101	3	Introduction to Geography
GEOL 185	4	Introduction to Meteorology
GEOG/GEOL 201	4	Physical Geography
GEOG 211	3	Regions and Nations
BIO/EH/GEOG 304	3	Introduction to Geographic Information Systems
GEOG 301 or 310	3	GIS for Social and Political Analysis or Human Geography
PSC/SOC 401	3	Social Science Methods
PSC/SOC 405	3	Social Science Statistics
GEOG 490	1	Senior Capstone
Science	9	Additional hours of science, computer science or math that do not fulfill any other requirements. These include courses from: BIO, CHEM, MATH, GEOL, EH, PHYS and CIS
ELEC. OPTIONS		Students Take Six (6) Hours of the Following:
GEOG 298	3	Topics in Geography
GEOG/INT'S 302	3	Environment and Society
GEOG 301 or 310	3	GIS for Social and Political Analysis or Human Geography

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GEOG 311	3	Geopolitics: Power and Conflict in a Global Context
BIO/EH/GEOG 404	3	Applications in Geographic Information Systems
GEOG 422	3	Geography of the United States
GEOG 457	3	Urban Geography
GEOG 491	1-3	Internship in Geography
GEOG 498	3	Advanced Topics in Geography
GEOG 499	1-3	Independent Study
SUPPORT. REQ.		Students Take Six (6) Hours of the Following:
ANTH 342	3	Comparative Cultures
ANTH 370	3	Globalization and Native Peoples
GEOL 300	3	Environmental Geology
PSC 423	3	Globalization and Development
SOC 361	3	Social Demography
	3	Or other as approved by academic advisor

E. Free elective credits:

29-30 credit hours; 30 hours required here if students take the minimum number of hours above in science and general education in order to reach 124.

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

There is a one-hour course, GEOG 490: *Senior Capstone*, which will serve as an opportunity for students to work with a mentor to explore career, graduate education, and employment options.

G. Any unique features such as interdepartmental cooperation:

This program uses existing courses in Geology, Political Science, and Sociology as part of its degree requirements, as well as cross-lists one course with Geology and another with Missouri Southern's Biology and Environmental Health programs as a degree requirement. In addition, students are required to take six hours in a supporting area outside of geography.

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Form PS – Program Structure



PROGRAM STRUCTURE

A. Total credits required for graduation: 124 for the B.A. in Geography

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C. General education: Total credits: 46-47

Courses (specific courses OR distribution area and credits):

Course Number	Credits	Course Title
	6	Written Communication
	3	Oral Communication
	3	Mathematics
	8-9	Life and Physical Sciences
	12	Social and Behavioral Sciences
	6	Humanities and Fine Arts
	2	Health and Wellness
	3	University Experience
	3	Institutional Requirement
Total	46-47	

D. Major requirements: Total credits: 52

Course Number	Credits	Course Title
GEOG 101	3	Introduction to Geography
GEOL 185	4	Introduction to Meteorology
GEOG/GEOL 201	4	Physical Geography
GEOG 211	3	Regions and Nations
BIO/EH/GEOG 304	3	Introduction to Geographic Information Systems
GEOG 301 or 310	3	GIS for Social and Political Analysis or Human Geography
PSC/SOC 401	3	Social Science Methods
PSC/SOC 405	3	Social Science Statistics
GEOG 490	1	Senior Capstone
Language	12	Students take 12 hours of the same modern language
ELEC. OPTIONS		Students Take Six (6) Hours of the Following:
GEOG 298	3	Topics in Geography
GEOG/INTS 302	3	Environment and Society
GEOG 301 or 310	3	GIS for Social and Political Analysis or Human Geography
GEOG 311	3	Geopolitics: Power and Conflict in a Global Context
BIO/EH/GEOG 404	3	Applications in Geographic Information Systems

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GEOG 422	3	Geography of the United States
GEOG 457	3	Urban Geography
GEOG 491	1-3	Internship in Geography
GEOG 498	3	Advanced Topics in Geography
GEOG 499	1-3	Independent Study
SUPPORT. REQ.		Students Take Six (6) Hours of the Following:
ANTH 342	3	Comparative Cultures
ANTH 370	3	Globalization and Native Peoples
GEOL 300	3	Environmental Geology
PSC 423	3	Globalization and Development
SOC 361	3	Social Demography
	3	Or other as approved by academic advisor

E. Free elective credits:

26-27 hours required here if students take the minimum number of hours above in science and general education in order to reach 124.

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

There is a one-hour course, GEOG 490: *Senior Capstone*, which will serve as an opportunity for students to work with a mentor to explore career, graduate educational, and employment options.

G. Any unique features such as interdepartmental cooperation:

This program uses existing courses in Geology, Political Science, and Sociology as part of its degree requirements, as well as cross-lists one course with Geology and another with Missouri Southern's Biology and Environmental Health programs as a degree requirement. In addition, students are required to take six hours in a supporting area outside of geography.

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Form PS – Program Structure



PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name Missouri Southern State University
Program Name Bachelor in Science in Geography
Date 6-24-15

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.
There are no special admission requirements.
- Characteristics of a specific population to be served, if applicable.
Not applicable

2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.
The faculty in the program have terminal degrees in geography with no teaching reduction for administrative responsibilities.
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.
It is estimated that 100% of credit hours will be assigned to full time faculty.
- Expectations for professional activities, special student contact, teaching/learning innovation.
Coursework is designed to provide abundant student/student and student/instructor interaction. In addition, students will have the opportunity to participate in campus club activities related to the major and they will also be supported in participating in Missouri Science Academy activities and in internship opportunities.

3. Enrollment Projections

- Student FTE majoring in program by the end of five years.
It is expected that there will be 15 students majoring in the program in five years.

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- Percent of full time and part time enrollment by the end of five years.
We estimate that 88% of students will be fulltime students in the program in five years with 12% part-time students.

4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.
We expect that after three years we will see five students complete the program and at 5 years we will expect to see ten students complete the program.
- Special skills specific to the program.
The Geography Program has two related sets of learning objectives, knowledge and skill goals that define the scope of the discipline of geography. These two related objectives each have specific objectives in order to demonstrate that the goals have been met. Each goal is associated with specific degree requirements.
 - Knowledge Goal: to demonstrate that students have mastered the scope of the discipline of geography
Knowledge Objectives: 1.Students will understand the fundamental concepts of location, distance, distribution, pattern, concentration, and density and be able to apply those concepts to physical and social phenomena. (GEOG 101) 2.Students will demonstrate mastery of the differences among the key subfields in geography, i.e. human geography and physical geography. (GEOG 101) 3. Students will learn the various processes that determine patterns of weather and climate on Earth's surface. (GEOL 185) 4. Students will demonstrate mastery of the various elements and processes that shape the Earth's atmosphere, lithosphere, hydrosphere and atmosphere. (GEOG/GEOL 201) 5. Students will learn the regional geography of the world with an emphasis on the characteristic human and physical components of each region. (GEOG 211) 6. Students will engage in analysis of the implications of spatial interaction and movement patterns in human geography. (GEOG 301 or GEOG 310) 7. Students will master methods used in social scientific study. (PSC/SOC 401)
 - Skill Goal: to demonstrate that students have mastered the necessary skills to enter the work force and conduct meaningful geographical analysis
Skills Objectives: 1.Students will demonstrate effective reading and writing as developed in the writing plan. (GEOG 490) 2.Students will learn to pose meaningful research questions. (PSC/SOC 401) 3. Students will demonstrate an ability to conduct statistical analysis on social data and development meaningful conclusions. (PSC/SOC 405) 4. Students will demonstrate mastery of fundamental concepts in mapping. (BIO/EH/GEOG 304) 5. Students will demonstrate the ability to gather their own spatial data, analyze those data, visualize those data, and draw meaningful conclusions from those data. (BIO/EH/GEOG 304)
- Proportion of students who will achieve licensing, certification, or registration.

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Not applicable

- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.

Each knowledge objective is related to at least one class that is required for the major. During the students' senior year they will enroll in GEOG 490: Senior Capstone where they will meet with an advisor who will work with them on developing a writing portfolio to satisfy skill goal one in addition to working in a classroom setting with their graduating cohort. In addition, as part of their Senior Capstone class they will take an exit questionnaire where they will have the opportunity to provide feedback on the Program specifically but also their experiences at MSSU in general; they will be encouraged to share their post-graduation plans and future contact information. In addition to this questionnaire they will sit for an exit exam that will consist of 35 questions; five from each knowledge goal. The questions drawn from goal six, where students have the option to take either GEOG 301 or GEOG 310, will be drawn from common course content as determined by the faculty teaching those courses. In order for students to complete the degree they must:

1. Successfully complete GEOG 490

A. Students will take an exit survey at the end of this course.

B. Students will complete a writing portfolio for this course where they assemble work from previous classes.

Students will:

i. revise several papers;

ii. make presentations on the revisions and

iii. write a reflection essay on the revision process.

C. Students must write a substantial research paper based on an approved topic covered in one of their elective courses or a supporting requirement course.

2. They must score at least 70% on their Senior Assessment Major Field Exit Exam. The exam questions are based on the five required core courses. If they fall short of this they can retake the exam in 30 calendar days. If they fall short a second time, they may retake the exam 90 days after the second attempt.

3. Must earn a C-average in 304, 401, and 405 in addition to successfully passing specific core assessments to be developed as the framework moves to plan assessment

4. Must earn a C or better on their final project for 304

Students thus will be assessed on writing, knowledge, and skills. Writing assessment will be derived from #1 Sections B and C. Knowledge assessment will be derived by the students score on the major field exam, #2 above. Lastly students' skill assessments will derive from #3 and #4 above.

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- Placement rates in related fields, in other fields, unemployed.
Ninety percentage of graduates are expected to employed in the field, while 10 percent are expected to employed in related fields.
- Transfer rates, continuous study.
Not Expected

5. Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. **If there are no plans to seek specialized accreditation, please provide a rationale.**
There is no special accreditation for this program outside of the scope of the university's normal accreditation.

6. Alumni and Employer Survey

- Expected satisfaction rates for alumni, *including timing and method of surveys.*
As part of the students capstone course they will complete a satisfaction suvery and will provide contact information. After graduation, at three-year, five-year, and ten-year intervals, students will be contacted and ask to complete a post-graduation survey that will help the program address student feedback. Expected overall satisfaction rates are average scores of 3.75 on a 5 point scale.
- Expected satisfaction rates for employers, including timing and method of surveys.
Using data gathered from students about their employment, each year employers will be contacted and surverved on their level of satisfaction. Expected overall satisfaction rates are average score of 3.5 on a point scale.

7. Institutional Characteristics

- Characteristics demonstrating why your institution is particularly well-equipped to support the program.
Missouri Southern is the primary degree granting institution in a service area of approxiently 300,000 people. Historically, Missouri Southern has supplied the area workforce with students prepared to be placed in jobs involving information technology. Similarly, Missouri Southern has a state-wide international education mission. The discipline of geography leverages these two outstanding characteristics of the institution and brings them together. These two characterics may be unquie in the State of Missouri.

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