



BOARD OF REGENTS

SUMMARY OF ITEM FOR ACTION, INFORMATION OR DISCUSSION

TOPIC: Coppin State University: Bachelor of Arts/Bachelor of Science in Geography

COMMITTEE: Education Policy

DATE OF COMMITTEE MEETING: November 14, 2011

SUMMARY: The proposed Bachelor of Arts and Bachelor of Science in Geography has been designed to align with the Geography Education National Implementation objectives (GENIP) and will serve a range of undergraduates, including those who will be seeking careers in the fast-growing geospatial industry as well as those who intend to pursue graduate degrees.

The proposed program would include instruction in the latest advancements in technology, including geographic information systems, the global positioning system and remote sensing satellite imagery, made possible with the 2010 opening of the new geospatial laboratory for research and learning. In Maryland alone, the Bureau of Labor and Statistics projects there will be more than 500 job openings each in geospatial industries each year. This number far exceeds the number of students graduating with Geography degrees from all existing programs in the University System of Maryland. The new program also would help prepare students for workforce careers in a global economy by equipping students with a deep understanding of foreign markets and global trends through courses such as World Regional Geography, Cultural Geography, Economic Geography and courses focused on regions such as Latin America and Africa.

Currently, the faculty teaching Geography courses include an Associate Professor and two Assistant Professors. The faculty have a track record of publications, externally-funded research, and service in professional organizations that speak to the quality of instruction and scholarship they will contribute to the proposed program.

A sizeable portion of the students are anticipated to be "non-traditional" and will be well served by the number of online courses and classes offered in the evenings, weekends and summer. It is also expected that students will be drawn from nearby community colleges and freshman and sophomore students who have completed the general education course in World Regional Geography. It is anticipated that the program will initially enroll twenty-five students and grow to sixty-eight students by 2016.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funding is necessary. The program will be supported through tuition and grant funding.

CHANCELLOR'S RECOMMENDATION: That the Committee on Education Policy recommend that the Board of Regents approve the proposal from Coppin State University to offer the Bachelor of Arts and Bachelor of Science in Geography.

COMMITTEE RECOMMENDATION: Approval.

DATE: November 14, 2011

BOARD ACTION:

DATE:

SUBMITTED BY: Irwin Goldstein (301) 445-1992 irv@usmd.edu

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

- New Instructional Program
 Substantial Expansion/Major Modification
 Cooperative Degree Program

COPPIN STATE UNIVERSITY
Institution Submitting Proposal

B.A. / B.S. in Geography
Title of Proposed Program

B.A./B.S. in Geography
Degree to be Awarded

Fall 2012
Projected Implementation Date

2206.00
Proposed HEGIS Code

450701
Proposed CIP Code

History, Geography & Global Studies
Department in which program will be located

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Contact E-Mail Address



Signature of President or Designee

10/28/11
Date

1) **The major is justified by state and national needs and by the mission of CSU and the strategic plan of the University System of Maryland.**

The need for a new degree in Geography arises from the mission of the university, the strategic plan of the University System of Maryland and the needs of the state and the nation.

The proposed major in Geography would help the university realize its new mission statement which includes a pledge to offer students a quality undergraduate programs in the liberal arts, sciences and technology while also providing educational access and diverse opportunities to them. The proposed major also would help Coppin State University align its efforts to several of the five themes identified in the University System of Maryland's Strategic Plan, USM in 2020: A Call to Action.

- The USM Strategic Plan's commitment to access (Theme 1) and the university's pledge to provide *educational access makes this new degree an urgent necessity*. Geography programs are robust and expanding at UMCP, Towson, UMBC, Salisbury and Frostburg. However, none of the states historically black colleges and universities has a BS or BA in Geography program. The community served by Coppin simply does not have adequate access to Geography instruction, and therefore, is being excluded from the already enormous and growing number of careers and other opportunities open to those able to major in Geography.
- The USM Strategic Plan's commitment to furthering Maryland's Economic Development (Theme 2) would be served by the proposed new Geography program. The new *Geography program would help address high priority needs of Maryland businesses* (Theme 3) as well as employers across the nation for more workers with the knowledge and skills of geographers. According to the US Department of Labor, geospatial industries are one of the fastest growing emerging industries in the nation. The new Geography program would include *instruction in the latest advancements in technology*. These geospatial technologies include Geographic Information Systems, the Global Positioning System and Remote Sensing satellite imagery. In Maryland alone, the Bureau of Labor Statistics projects there will be more than 500 job openings each in geospatial industries each year (<http://www.careervoyages.gov/geospatialtechnology-main.cfm> Jan. 2010). The number of projected job openings each year far exceeds the number of students graduating with Geography degrees from all University System of Maryland schools each year. Meanwhile, the Employment and Training Administration of the U.S Dept of Labor identified geospatial industries as a "high growth, high demand, economically vital sector" in its recent "High Growth Job Training Initiative" (<http://www.doleta.gov/BRG/JobTrainInitiative/> Jan.2010). The new Geography program also would help *prepare students for workforce careers in a global economy*" by equipping students with a deep understanding of foreign markets and global trends through courses, such as World Regional Geography, Cultural Geography, Economic Geography and courses focused on regions such as Latin America and Africa..
- The new Geography degree program represents a more effective way to leverage available resources, as described in the USM Stategic Plan's Theme 4. The new program harnesses existing resources to produce a revenue stream that far outweighs expenditures.

No new general funds from the State of Maryland will be required for this new program. And the nascent program already has external funding of \$100,000/year for the next five years.

- The new Geography degree also would help Coppin State and USM achieve and sustain national eminence, as described in Theme 5. Launching a new Geography program at Coppin State University would draw attention nation-wide in the discipline. It would be the first Geography program created at an HBCU in at least 40 years. The problem of inadequate educational access described above also exists nationwide as African-Americans are underrepresented as undergraduates, as graduates and as faculty, according to the Association of American Geographers. CSU's new Geography program would significantly improve representation in the discipline.
- The nascent Geography program *already has excelled at research*, which has involved students in fieldwork from Africa to the Caribbean. It has *garnered more than \$1 million in external grants*. The university's mission statement commitment to research means that Geography's track-record of excellence warrants the expansion of the program to offer full-blown BS or BA degree program so that more students can benefit from research and in turn so that more research can be undertaken. .

Finally, the new *Geography degree would serve the community* as the university's mission statement pledges to do. The program already has forged a "k-16 Geography vertical integration team" with teachers from the Urban Educational Corridor schools to improve instruction in Geography and provided them a workshop in Geographic Information Systems. In addition to providing instruction in subjects, such as Urban Geography, the program would contribute to the goals of the Coppin Heights Community Development Corporation.

B. Characteristics of the Proposed Program

1. Educational objectives of the Program

The objectives of the proposed educational program are to:

- Graduate students who are "geographically informed person(s), who see meaning in the arrangement of things across the Earth's surface; who appreciate the relationships between people, places, and environments; who use geographic skills; and who apply geographic perspectives to life situations" (<http://genip.tamu.edu/>).
- Prepare students for immediate entry into available career opportunities and into graduate schools.

2. Curriculum design

- Development considerations.

The curriculum was designed to attain learning outcomes that align with the Geography Education National Implementation Project (GENIP) objectives that were established by a consortium of the Association of American Geographers, The American Geographical Society, The National Council for Geographic Education and the National Geographic Society. In addition, projections of Maryland's future needs for a workforce with geographical knowledge and technological skills steered the

design. Also, the design reflects the great attention paid to retaining students and to ensuring they make progress toward earning the degree in four years. The design aims to accommodate the schedules of the many non-traditional students at CSU by providing a range of upper-level courses to satisfy requirements, by offering courses in the evening, on weekends and in the summer, and by delivering courses online. Finally, the design seeks to facilitate the transfer of students from nearby Maryland community colleges, where existing courses could easily form the basis of Recommended Transfer Programs (RTPs).

- Description of program as it would appear in the catalog.
The Bachelor of Science and Bachelor of Arts in Geography program equips students with knowledge and skills needed in a rapidly expanding range of careers in both the public and the private sectors, while also providing them a solid foundation for graduate studies. The degree prepares students to take advantage of opportunities in an era of globalization and rapid technological innovation and empowers them with the discipline's unique spatial perspectives on human societies and the environment.
- General requirements for degree
Geography majors must complete 120 credit hours to receive the Bachelors degree. This includes 45 credit-hours in the Geography curriculum and 40 credits of general education requirements.
- Total number of credits and their distribution
The proposed curriculum for the BS or BA degree consists of a total of 45 credits with 18 of the credits from foundational courses and the remainder in 300-level courses and 400-level courses. The list of courses below details the distribution of upper-level and lower level courses. (Students who opt to pursue the BA rather than the BS also must satisfy university requirements for courses in foreign languages and philosophy)
- List of courses in the proposed Geography Major

Foundation Courses (18 credits, including all of the courses below).

1. Elements of Geography (GEOG 101) 3-credits
2. World Regional Geography (GEOG 102) 3-credits
3. Cultural Geography (GEOG 201) 3-credits
4. Physical Geography (GEOG 202) 3-credits
5. Geography Tools & Techniques (GEOG 303) 3-credits
6. Statistics (MATH 203) 3-credits

Upper-level Geography Electives (26 credits, including at least one regional course, at least one topical course, at least one geospatial technologies course, a research methods courses, a capstone seminar, and two supporting history electives).

Regional (select at least one)

- North America (GEOG 322) 3-credits
- Maryland (GEOG 320) 3-credits
- Latin America (GEOG 324) 3-credits
- Africa (GEOG 326) 3-credits

Topical (select at least one)

Political Geography (GEOG 402) 3-credits

Economic Geography (GEOG 403) 3-credits

Urban Geography (GEOG 406) 3-credits

Socio-Economic Geography of Poverty (GEOG 407) 3-credits

Geospatial Technologies (select at least one)

Remote Sensing (GEOG 372) 3-credits

Geographic Information Systems (GEOG 373) 3-credits

Methods Courses (required)

Research Methods (HIST 300) 3-credits

Seminar (required)

Seminar in Geography (GEOG 307) 3-credits

Upper-level Supporting History Electives (6 credits, selected from the following courses).

Modern Africa (HIST403) 3-credits

Modern Asia (HIST 404) 3-credits

Latin America (HIST 405) 3-credits

Modern Europe (HIST 411) 3-credits

Modern Russia (HIST 417) 3-credits

Middle East (HIST 426) 3-credits

- Expected student learning outcomes and means of assessment

Assessment of Student Learning Outcomes (SLO)

The University adopted six institutional learning outcomes as prescribed by Middle States. The students in the new Geography major will be assessed regularly on student learning outcomes. Recently the department of History, Geography and Global Studies submitted a listing of courses showing the various levels of mastery in each of the SLOs. The following SLOs will be measured by the courses in the new Geography program.

- *Oral and written communication* will be assessed through a research paper and oral presentation in the capstone seminar, as well as, through assignments in other classes.
- *Analytical reasoning* will be assessed in examinations and assignments in several courses where students make observations, develop hypotheses, weigh variables to explain geographic phenomena and also in a statistics course. *Spatial analysis and reasoning* in particular will be assessed in projects, exams and assignments in several courses, where students will be tasked to undertake regional analysis, location analysis, and spatial problem-solving.
- *Information Literacy* will be evaluated through assignments and projects in Geography: Tools and Techniques, Geographic Information Systems and Remote Sensing.
- *Social and Self-Awareness* will be assessed in several courses through exams, papers and assignments where students learn to appreciate diverse cultural

heritages and global societies and gain understandings of various economic, political and organizational systems.

- *Responsive citizenship* will be assessed in several courses through exams, papers and assignments, where students reflect respect and understanding of the diversity of people, ideas, communities and cultures. .

3. Demonstrable quality of program faculty

Currently, the faculty teaching Geography courses include an Associate Professor, and two Assistant Professors. All of them have PhD's in Geography, except for one of the Assistant Professors, who will defend his dissertation in AY10/11. The faculty have a track record of publications, externally-funded research, and service in professional organizations that speaks to the high quality of the instruction and scholarship they will contribute to the proposed program.

4. Student audience to be served by program and enrollment estimates

The program will serve range of undergraduates, including those who will be seeking careers in the fast-growing geospatial industry and those who intend to pursue graduate degrees in programs at UMCP, UMBC, TSU and other institutions. A sizeable portion of the audience will be non-traditional students attracted by the number of online courses and classes offered in the evenings, weekends and summer. A large number of freshmen and sophomores will be drawn into the program after exposure to the discipline in World Regional Geography, a GER course. Students from nearby community colleges also will be drawn to the program by the ease with which they can transfer credits through articulation agreements and RTPs.

With robust plans for recruitment activities and large numbers of students exposed to Geography in the GER courses, enrollment is likely to be at least 25 full and part-time students in the first year and increase rapidly in subsequent years as a result of peer recruiting. (See below for year by year estimates.)

5. Impact on student's technology fluency

The proposed curriculum will greatly enhance students' technological fluency. Students will hone their skills with internet-based research, word processing, presentations, spreadsheets, and statistical software. In addition, students will gain skills with Geographic Information Systems, the Global Positioning System and with technology for the analysis of remotely sensed imagery from satellites.

6. Library requirements

The library's current holdings and periodicals along with books available through inter-system loan will meet the new program's needs.

7. Facilities and equipment

In Fall, 2010 CSU will open a new Geospatial Laboratory for Research and Learning. This facility and existing facilities and equipment will meet the new program's needs.

Finance

The proposed new program makes a more cost-effective use of existing resources to produce a revenue stream that far outweighs expenditures. All the necessary faculty are in place already and teaching classes. However, by forging the courses into the new proposed curriculum, CSU will capture far more revenue from tuition and fees without significantly increasing expenditures for faculty or administrative support. No new general funds from the State of Maryland will be required for this new degree program. (see table 1). Revenue from tuition and fees from full-time and part-time students and from external sources will exceed total annual expenditures starting in Year 1 of the program. Meanwhile, the degree program also will be supported by \$100,000 each year beginning in Year 1 and continuing through Year 5 in federal funding from the Department of Education. Current faculty will teach the courses. No new or renovated space is needed. In fall, 2010 CSU opened a new Geospatial Teaching and Research Lab. The department's current staff will assist in the administration of the program. Additional support staff is not needed.

Resources and Expenditures

Resources Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Reallocated Funds ¹	0	0	0	0	0
2. Tuition/Fee Revenue ²	106,605	168,834	221,570	254,985	287,400
(c+g below)					
a. # Full Time Students	15	22	30	35	40
b. Annual Tuition/Fee Rate	5,547	5,547	5,547	5,547	5,547
c. Annual Full Time Revenue (a x b)	83,205	122,034	166,410	194,145	221,880
d. # Part Time Students	10	20	24	26	28
e. Credit Hour Rate	156	156	156	156	156
f. Annual Credit Hours	15	15	15	15	15
g. Total Part Time Revenue (d x e x f)	23,400	46,800	55,160	60,840	65,520
3. Grants, Contracts, & Other External Sources ³	100,000	100,000	100,000	100,000	100,000
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 - 4)	206,650	268,834	321,570	354,985	387,400

Notes:

Tuition and fees are assumed to remain constant, as the Governor and Legislature have been reluctant to raise them in the past several years. While it may seem likely revenues from these sources may increase in response to forecasts of the state's budget deficits, it is also very difficult to foresee any salary increases given those budget shortfalls. Therefore, to be consistent and to provide a reliable basis for comparison of resources and expenditures both salaries and revenues are held constant.

TABLE 2: EXPENDITURES					
Expenditure Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Total Faculty Expenses	144,800	144,800	144,800	144,800	144,800
a. # FTE	2.5	2.5	2.5	2.5	2.5
b. Total Salary	125,600	125,600	125,600	125,600	125,600
c. Total Benefits	19,200	19,200	19,200	19,200	19,200
2. Total Administrative Staff Expenses (b + c below)	5,333	5,333	5,333	5,333	5,333
a. # FTE	0.1	0.1	0.1	0.1	0.1
b. Total Salary	4,000	4,000	4,000	4,000	4,000
c. Total Benefits	1,333	1,333	1,333	1,333	1,333
3. Total Support Staff Expenses (b + c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
4. Equipment	2,500	2,500	2,500	2,500	2,500
5. Library	1,000	1,000	1,000	1,000	1,000
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	0	0	0	0	0
TOTAL (Add 1 - 7)	153,683	153,683	153,683	153,683	153,683

Addendum A: Course Descriptions

GEOG 101 - Elements of Geography

- 3 Undergraduate Credits
- A course designed to introduce students to the field of geography and its relationship to other disciplines. Content will focus on the various subfields of geography and the tools involved in their study.

GEOG 102 - World Regional Geography: Emerging Issues

- 3 Undergraduate Credits
- A survey of the physiographical and the cultural characteristics of the major world regions and the significant issues in each region.

GEOG 201 - Cultural Geography

- 3 Undergraduate Credits

A course using the discipline's spatial perspective and thematic traditions to explore the geography of cultural features, such as landscapes, religions, languages, ethnicity, politics and economics.

GEOG 202- Physical Geography

- 3 Undergraduate Credits
- A course using the discipline's spatial perspectives and thematic traditions to explore the geography of physical features, such geomorphology, spatial aspects of climate, and areal patterns of biogeography.

GEOG 303 - Geographic Tools and Techniques

- 3 Undergraduate Credits
- An introduction to Geographic Information Systems (GIS), Global Positioning Systems (GPS), satellite remote-sensing and tools and techniques that geographers use to explain phenomena.

GEOG 307 - Seminar on World Geography

- 3 Undergraduate Credits
- A study of the literature, methods and techniques of research for the discipline that provides an opportunity for students to do extensive research on a variety of geographical topics, issues and events.

GEOG 320- Geography of Maryland

- 3 Undergraduate Credits
- A course focusing on the natural regions of Maryland, the environment, the cultural landscape, and the people in relation to the political, social, and economic development of the state and the nation. Field trips are integrated throughout.

GEOG 322- Geography of North America

- 3 Undergraduate Credits
- A regional study of the United States, Canada and Mexico, including their physical and cultural features, their spatial interactions and geographic perspectives on their issues.

GEOG 324 - Latin American Geography

- 3 Undergraduate Credits
- A regional study of South America, Central American and the Hispanic Caribbean, including their physical and cultural features, their spatial interactions and geographic perspectives on their issues.

GEOG 326- African Geography

- 3 Undergraduate Credits
- A regional study of Africa, including its physical and cultural features, the spatial

interactions within the region and between the region and other world regions and geographic perspectives on its issues.

GEOG 372 - Remote Sensing

- 3 Undergraduate Credits

A course expanding upon GEOG 303 to deepen students understanding of and skills with the broad range of satellite remote sensing imagery and some of their applications to Geographical topics.

GEOG 373- Geographic Information Systems

- 3 Undergraduate Credits

A course expanding upon GEOG 303 to deepen students understanding of and skills with Geographic Information Systems and some of the applications to Geographical topics.

GEOG 402- Political Geography

- 3 Undergraduate Credits

An examination of the natural and cultural resources of major nations, states, and world regions from the geographical point of view, emphasizing the problems, weaknesses, and strengths of each state.

GEOG 403- Economic Geography

- 3 Undergraduate Credits

A survey of the sources of the most important raw materials of economic value, emphasizing production, distribution, and utilization of significant commodities. Attention is also given to the development of industrial regions and trade routes and to the development of a world viewpoint concerning the interdependence among peoples and nations.

GEOG 406 Urban Geography

- 3 Undergraduate Credits

An analysis of cities as units/areas through discussions of the characteristics of cities, through classification and comparison, and through a consideration of the theoretical distributions of cities. Methods of studying and analyzing patterns of the interior of cities are included, and emphasis is placed on sources of information and available geographical research.

GEOG 407 Socio-economic Geography of American Poverty

- 3 Undergraduate Credits
- A geographical analysis of poverty and its existence in America in the past and at present, stressing theories regarding poverty and including actual field experiences in local poverty areas and work in agencies that deal with poverty.