

**Office of the President
California State University, Chico**



Executive Memorandum EM 18-004

February 14, 2018

From: Gayle E. Hutchinson, President

Subject: Discontinuation of the Master of Arts in Geography

Upon the recommendation of the Academic Senate and the concurrence of the Provost, I approve the Discontinuation of the Master of Arts in Geography, effective fall 2018.

Policy Title:	EM 18-004 Discontinuation of the Master of Arts in Geography
Contact:	Department of Geography and Planning
Supersedes:	
Revision:	
Enabling Legislation or Executive Order:	

Discontinue Graduate Program: See EM 01-014

Program Name: Master of Arts in Geography

Program named above is:


Removing the Program and both Options: Geography, and Environmental Policy and Planning

Rationale:

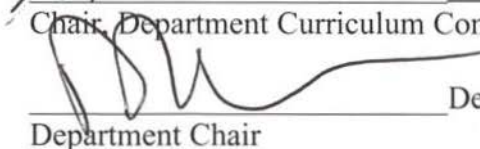
The program was suspended by the BSS Dean in Spring 2012 for budgetary savings to the college based on the program's numbers of students enrolled and graduation rate (see attached memo). In the elapsed four years we focused on finishing the remaining 25 students, had faculty discussions about retooling the program with the Graduate School and BSS Dean's office. After several plan modifications were developed in collaboration with the Graduate School, an agreeable plan to retool the program was proposed. In the end, after further discussion with faculty and the BSS Dean we voted to close the program. Our faculty ranks have fallen below the required ten actively teaching in the department to support both an undergraduate and graduate program simultaneously. Retirements and the lack of sufficient hiring since 2008 have increased faculty workload to support a graduate program. Managing a 4/4 load with thesis or projects or proposed comprehensive exam amongst seven faculty is unsustainable and rather detrimental to program quality. While we could do it with a reduced faculty if we chose to go with our final plan to only allow a comprehensive exam as a culminating experience, we as a faculty decided to terminate the program as we were uninspired by the situation. The flat budgetary climate at CSU Chico and discussed with our college Dean also weighed on our decision. This program ran from 1970 - 2012. We are proud of the students that it produced during this time, many of whom went on to become engaged professionals or continued onto PhD programs.

Required Signatures

The Department of Geography and Planning has reviewed and approved this program discontinuation.



Chair, Department Curriculum Committee

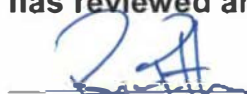


Department Chair

10/31/2016
Date

10/31/2016
Date

The College of BSS has reviewed and approved this program discontinuation.



Chair, College Curriculum Committee

3/7/17
Date

CSU Chico
Curriculum Services

MAR 16 2017

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Discontinue Graduate Program: See EM 01-014

College Dean  Eddie Vela _____

Date 3/7/17

Curriculum Review Completed

Date 9/8/17

Note: As stated in EM 15-005: Although this document identifies many of the issues deemed essential for a thorough, open, and complete discussion and debate, those involved in pursuing program discontinuation should recognize that it would be inappropriate to judge all programs by the same standards or specify the range of information necessary to make a considered recommendation in each particular case. Therefore, the Academic Senate may 1) consider issues not specifically listed in this document and 2) recognize that some issues listed in this document may not be pertinent to a specific case. The goal is to help the Academic Senate reach an informed recommendation based on the evidence provided.

Description and History of the Program:

- Provide a brief description of the program including:
 - When it was approved and/or how long has it been in place at CSU, Chico

The original program was started in 1970. It ran from 1970 until its suspension at the end of Spring semester 2012.

- History of the program

Started as an MA in Geography with an option in Geography only then added an option in Rural and Town Planning in 1986. The Rural and Town Planning option was removed in the early 2000s to be replaced by an option in Environmental Policy and Planning in 2005.

- Relation to other programs, and

The Rural and Town Planning Option was linked to the Public Administration program in the Department of Political Science until its removal. The graduate program's seminars historically were used by other graduate programs from Social Science, Political Science, Biology, Geosciences, Parks and Recreation, and occasionally Anthropology.

- Status as a professional or pre-professional program.

None.

- Describe the relationship of the program to the University's Strategic Plan, College Strategic Plan, Academic Plan and other statements of mission, goals and values.

The program supported the role of graduate level education in the CSU as a Tier II school, and especially as a rural residential university in Northern California. The MA program provided unique contributions to our service area and the north state. We are the only geography graduate program north of Sacramento within California. Our students and graduates provide unique services to the region, which cannot be replaced by other academic units at CSU Chico. The services provided are recognized by the north state community as being of value. These services

Discontinue Graduate Program: See EM 01-014

include studies at the interface of environmental and societal issues including fire safe planning, water resources planning, support to planning policy development, and community analysis.

- Who was it designed to serve (describe the student need)? What are the societal needs? (E.g., cultural, technological, economic, artistic, scientific). Are similar programs available elsewhere in the CSU?

The program served those students wanting to pursue a graduate degree in Geography, Planning and/or Environmental Management/Studies. Many of our students hail from communities within our service area, and ultimately returned to those communities as leaders. The MA program is an integral component of planning, resource management and decision making for the north state. Additionally our MA graduates are integral to the community college lecture pool in our region. The societal needs covered included county and city planners; county, state and federal resources agencies, community college lecturers and those students wanting to go on to PhD programs. Other Geography MA programs available in Northern California CSUs include San Francisco, East Bay, and San Jose States (all Bay area campuses). In Southern California they include Northridge, Los Angeles, Fullerton, Long Beach, and San Diego States.

Indicate areas of concern, with reference to the above history, as it pertains to the proposed discontinuation.

- What is the status of the program now? Why should it be discontinued?

Suspended by the BSS Dean since the end of Spring 2012 due to numbers of students enrolled and graduation rate (see attached memo). This action was linked to college budgetary savings issues related to the post-2008 environment within the CSU and on this campus as deficits needed to be closed. All remaining students since that time of suspension have finished, or have been academically disqualified for various reasons. After many discussions with the Graduate school about what is allowed in California (Title V) and CSU Chico as a graduate experience and the definition of a culminating experience we proposed a program plan to improve student success through a modified culminating experience (see exhibit A). Due to lack of enthusiasm for this plan by our faculty and having to make budgetary choices between bringing back the graduate program and pursuing a new BS undergraduate degree as discussed with our Dean, we voted to close the program in Fall 2016. The lack of faculty enthusiasm for the modified program and lack of resources to sustain such a program under current and future flat budgets drove this decision. Since the program only brings in on average eight graduate students per year, it was deemed unsustainable within the new financial realities the campus faces. Since 2008, the department has experienced faculty attrition through retirements with little hiring to support both undergraduate and graduate programs simultaneously. With department faculty numbers below ten full time teaching faculty, it creates an unsustainable workload burden to teach 4/4 loads with additional MA advising. We currently have eight full time faculty, but only seven are full time teaching, the other is a full time administrator for another program in the College of BSS.

- Was the program suspended or considered for suspension?

Suspended by the BSS Dean in Spring 2012.

Discontinue Graduate Program: See EM 01-014

- What efforts have been made to sustain or improve the program? If there have been no efforts, please explain why efforts have not been made to improve the program (including suspension for purposes of re-evaluation [EM 13-057]).

Developed a series of retooling plans in the department in collaboration with the Graduate School over a series of 3.5 years. The Graduate School was helpful but only in their ability to show were flexibility in restructuring or managing a program could be had under California state law (Title V) and CSU Chico's own graduate education rules. Tried to balance program quality and culminating experience with program cost. Our faculty grew tired of the process and were ultimately not inspired by the final program plan, and instead we directed our time and resources to developing a new Bachelor of Science degree. The latest graduate reorganization proposal is attached for context.

- How many students does the program serve? What are recent trends in enrollment? What is the external demand for the program from an employment perspective?

We used to serve between 25-30 students each year with 8-12 new students each year. However, post-2008 we did see a dip in new student applications, probably linked to the recession. Students who were enrolled frequently sought jobs to support themselves during the recession, and consequently slowed their degree progress. We still receive inquiries from students wanting to apply to our program, typically 6-8 per year. The employment demand was largely from city, county, state and federal agencies, including many community colleges. Many students went on to become planners, policy analysts, community college lecturers or natural resource managers in both the private and public sectors. There continues to be some demand for those interested in environmental management, which was being addressed in the program modifications.

- What are the shortcomings of the program that have led to the proposal to discontinue? (What criteria were used to gather data on the program? How was the data assessed? Has the program been through a five year review? If not, why not? If so, what were the results of the last review?)
 - Lack of enthusiasm from department faculty with the modified program plans and culminating experience options as stipulated by California and current campus graduate education policies.
 - Cost concerns due to limited resources and a tight/flat budgets on the campus sustained since 2010.
 - Lack of tenure track hiring to maintain both an undergraduate and graduate program.
 - Realization that graduate programs linked to larger departments or linked to federal or state accreditation bodies for professional degrees have more support mechanisms.
- Describe current staffing levels, FTES and other information relevant to program performance.

See previous discussions above.

Discontinue Graduate Program: See EM 01-014

- Describe the financial status of the program. Provide evidence of the relative expense or revenue of the program compared to similar programs.

Total cost to run the program was \$32,000 per year. This is based on the following: four graduate seminars per year (small class size 8-12 students), one course release per year for graduate coordinator, and graduate teaching assistant funds to teach GE lab sections in GEOG 1011 Introduction to Physical Geography.

- Provide additional evidence to support the discontinuation proposal. (If possible, reference original EM of approval so readers can go to that evidence.)

Department faculty have voted to no longer support the continuation of the program under current fiscal and academic conditions.

Describe the consultation process and procedures:

- Evidence of consultation with faculty, administrators, students, and related stakeholders in the collaborative preparation of the plan, assessment, and timeline. Evidence may include but is not limited to dates, times, minutes, and vote counts from meetings, lists of attendees, correspondence, etc.

There is a long record of consultation since Fall 2012 with the Graduate School Dean, our College Dean(s), internal faculty members, former students, and the departments Alumni Advisory Board. This situation and its outcome has long been vetted and contemplated by all of our remaining faculty members. This was not an easy decision as the program did run from 1970-2012 with many successful students. However, we are in a new fiscal environment post-2008 with little movement and improvement in the trend lines at the CSU for favorable outcomes to support this graduate program.

Discontinue Graduate Program: See EM 01-014

Exhibit A

Final Program Reorganization

MEMO

Date: April 11, 2012

From: Gayle E. Hutchinson, Dean
College of Behavioral and Social Sciences

RE: Rationale for admission suspension for Geography MA program

The College of Behavioral and Social Sciences announces the suspension of admission to the master's degree in Geography and Planning beginning Fall 2012. Students currently enrolled in the program will be allowed to complete their MA degree.

The MA degree is a 30 unit program and requires students to complete a thesis or project. While the MA program in Geography and Planning is valuable to those interested in pursuing graduate work in this important disciplinary area, the MA program serves relatively few students. The department is aware of the slow rate at which students matriculate through the program (see Table 2).

The decision to suspend admission to the program is based on:

- Numbers of students enrolled
- Graduation rate (e.g., % graduating after 2, 4, or 7 years in the program)
- Need to improve program delivery structure

Geography and Planning MA: Numbers of Students and Graduation Rate

Information about numbers of applications, fall enrollments and graduated per year shows that the MA in Geography is a relatively small program but with very few students graduating each year.

Table 1. *Summary of GEOP MA Applicants, Fall Enrollments, and Number Matriculated each Academic Year from 2006-2007 to present.*

MA GEOP	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Applications	13	12	16	12	17	12
Fall Enrolled	14	20	20	11	19	18
Graduated	6	5	1	1	3	

Note. Data obtained from the School of Graduate Studies, April 2012

As can be seen in Table 1, the modal application rate to the GEOP MA is 12. The numbers enrolled in Fall classes include those recently accepted and those in the process of matriculation.

Table 2 shows the acceptance rates into the MA program (Cohort Count) from 1995 to 2008, and includes 2, 4, and 7-year matriculation rates.

Table 2. *Summary of Number of Students Accepted in to the GEOP MA and 2, 4, and 7 year graduation rate data from 1995 through 2008.*

Entry Year	Cohort Count	Percent Graduating Within		
		2 Years	4 Years	7 Years
1995	11	18.0%	36.0%	55.0%
1996	7	0.0%	14.0%	29.0%
1997	12	0.0%	17.0%	33.0%
1998	4	0.0%	50.0%	50.0%
1999	7	29.0%	43.0%	43.0%
2000	6	0.0%	17.0%	33.0%
2001	7	0.0%	29.0%	29.0%
2002	4	0.0%	25.0%	50.0%
2003	3	0.0%	33.0%	33.0%
2004	4	25.0%	100.0%	0.0%
2005	7	14.0%	43.0%	
2006	6	0.0%	17.0%	
2007	8	0.0%	0.0%	
2008	4	0.0%		

Note. Data obtained from Data Store/Insight April, 2012

As seen in the Table 2 the modal 2-year completion rate is 0%. The 4-year graduation rate is better but it is typical that less than 50%. The same is true for the 7-year graduation rate. Note in Table 2 that there are no 2009-2011 graduate rate data, suggesting that students admitted to the program since 2009 have yet to graduate.

As a result of a recent 5-year review and feedback from the campus graduate council reviewer, the department has been in deliberations about ways to improve the program, especially matriculation rate.

Application Suspension and MA Revisions

The department of Geography and Planning should continue to offer necessary classes (or approve substitutions) for those currently in the GEOP MA. While the decision to suspend admission to any program is not welcome news, the program is not being deleted. During the application suspension period I will work with and encourage the Department of Geography and Planning to continue their deliberations on ways to improve the program, especially those articulated in the March 23, 2012 Briefing Statement submitted to me by Dr. Hankins.

Attempt to reorganize

Proposal for a “New” Option

- I. Proposed title of new option and name of degree program under which the new option will be offered.
Geography with an option in Environmental Policy and Planning
- II. Academic year of intended implementation.
2016-2017
- III. Name of the department and college submitting the proposal.
 - A. Identify the unit, which will have primary responsibility for the option.
Department of Geography and Planning, College of Behavioral and Social Sciences
 - B. Identify the level of the option (i.e., undergraduate or graduate).
Graduate
- IV. Statements on questions of need and demand.
 - A. Relation of the program to the University Strategic Plan.
The Geography MA has long supported the University’s Strategic Plan. With the revisions to the program we envision continued support for the Strategic Plan’s priorities (1-6) as follows:
 1. We believe the inclusion of graduate students in our classes enhances the learning environment. Graduate students add to the dynamic learning in undergraduate courses they are involved with. Further students pursuing thesis or project research frequently engage with their peers and undergraduates to accomplish fieldwork. This sort of activity enriches the knowledge gained from classroom activities.
 2. Preparing for graduate seminars and interacting with graduate research enables faculty to maintain their professional development (e.g., remain current in their field, explore new areas of research, and stimulate innovative thinking) which is not often afforded by undergraduate education alone.
 3. Due to the rapid rate of technological advances it is often difficult to keep up with new technologies. Graduate students provide a link to newer technologies as they may have generational knowledge of such technologies and thus may serve as a bridge to integration of new technologies into the learning environment.
 4. Through class activities, projects, and theses, graduate students contribute to the needs of our region and beyond. Current and former students have completed projects, research or have gone on to employment that benefits communities and organizations throughout the region. Some examples of graduate theses and project topics serving needs in our region include fire modeling and planning, air quality, carbon sequestration, watershed planning, and analysis for urban development. Our graduates frequently become leaders in non-governmental organizations

and agencies tasked with environmental planning and natural resource management throughout the region

5. The proposed revisions to our program reflect the intent to offer a graduate degree with less fiscal impact to state resources. Specifically, we have reduced the offerings of graduate seminars in our program, and we have sought to better integrate courses across departments to enrich learning opportunities while reducing costs of the program.
 6. See comment 4 above.
- B. Need for the proposed option.
1. Identify other CSU campuses with the proposed option. Please see the (somewhat partial) document from the Chancellor's Office, which lists "environment-related CSU Degree Programs:"
https://www.calstate.edu/app/programs/ECS/CSU_Enviro.pdf
 - a. SFSU M.A. in Geography with a Concentration in Resource Management and Environmental Planning (<http://bulletin.sfsu.edu/programs/cse/geograp#672407>)
 - b. CSU, Fullerton: MS Environmental Studies
 - c. Humboldt State: MA Social Science/Environment and Community
 - d. San José State: MS Environmental Studies and MS in Urban Planning with Specialization in Environmental Planning
 - e. CSU, Stanislaus: MS Ecology and Sustainability, with Concentrations in Ecological Conservation and Ecological Economics
 2. Identify neighboring institutions with the proposed option. See above for CSU Humboldt State, SFSU and San José State. University of California:
 - a. Geography Graduate Group, UC Davis—offers depth sequences in Nature and Society and in Environmental Sciences.
 - b. UC Berkeley Master of Development Practice (<http://mdp.berkeley.edu/curriculum/>)
 3. Identify differences, if any, between these programs and the proposed program. The themes and curricula of MA environmentally-related programs do overlap. Almost all have geographic information sciences and other techniques courses, practicum courses, and some resource-oriented coursework (water, for example). Most of the programs are interdisciplinary.

Our unique profile stems from the fact that our students often choose to or initially seek locally-oriented issues common to the North State and go to work for local agencies in rural Northern California. Our practicum courses and certain upper division

courses included in our proposal reflect that emphasis because of how we teach them as research-related field courses. These include Pyrogeography and Site Planning but also the seminars with rotating faculty and topics.

C Identify other closely related curricula currently offered by the campus. The MS in Environmental Science offers similar curricular experience.

___ Explain the impact the proposed option will have on these programs.

We do not anticipate any impacts on the MS in Environmental Science.

4:2 Explain how current programs do not meet the proposed option's objectives.

Our emphasis is on applied policy-oriented solutions as well as its expertise in land-use planning. Planning is a widely recognized asset that this university has offered the region for decades.

C.D. ___ Student demand for the program.

1. Give evidence of serious student interest in the proposed option.

At CSU Chico the MA in Geography has existed for over 40 years. Since the program was suspended in 2012, there has been continual interest (typically about 10 per year) by prospective students seeking opportunities to enroll. Currently, the most determined students have opted for degrees through interdisciplinary studies.

2. Estimated number of students seeking the option

a. in the year of initiation. 10

b. after three years. 10+

c. after five years. 10+

d. Describe methodology for developing these estimates.

Based on past and current interest in the program.

3. Estimate the number of options awarded

a. in the year of initiation. 8

b. after three years. 28+

c. after five years. 44+

d. Describe methodology for developing these estimates. The proposed option involves two culminating experience options; by thesis or by comprehensive examination. It is anticipated that most students will opt for the comprehensive examination, and will fulfill their degree requirements in one year. However, some students may take longer than one year to complete, and some students may seek opportunities to complete a thesis.

D-E. ___ Identify professional uses for the proposed option.

Based on past graduates from the option in Environmental Policy and Planning it is anticipated that our students will go on to employment as environmental consultants, natural resource managers, environmental regulators, leaders of non-governmental entities. Some may pursue further education at Ph.D. granting institutions.

V. Resources

A. Faculty members for the required courses in the program Professional experience

Name	Chase, Jacque
Rank	Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	1993; Urban Planning
Professional Experience	Regional and international development, rural planning, migration, urban labor markets, demography, political ecology, Latin America, Brazil, Northern California

Name	Fairbanks, Dean
Rank	Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	2001; Ecology
Professional Experience	Landscape ecology, biogeography, land-use change, human-environment interaction, GIS, remote sensing, Southern Africa, Northern California

Name	Hankins, Don
Rank	Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	2005; Geography
Professional	Pyrogeography, water resources, riparian habitats, restoration

Experience	and stewardship, conservation planning, environmental policy, traditional knowledge, Indigenous people and self-determination, California, Australia
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Name	Knigge, LaDona
Rank	Associate Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	2006; Geography
Professional Experience	Community development and planning, critical GIS, urban gardens, women's studies, Northern California

Name	Sato, Noriyuki
Rank	Associate Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	2008; Geography
Professional Experience	Applied climatology, climate change and impacts, transportation geography, quantitative methods, Japan

Name	Stemen, Mark
Rank	Associate Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	1999; History
Professional Experience	Environmental history, economics, sustainability, environmental issues, building resilient communities

- B. List the faculty members for the elective courses in the program by All of the above and the following:

Name	Brady, Scott
Rank	Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	1996; Geography
Professional Experience	Human geography, cultural landscapes, repeat landscape photography, Central America and Mexico, Northern California

Name	Yang, Xining
Rank	Assistant Professor
Appointment Status	Tenure Track
Highest Degree Earned	Ph.D.
Date & Field of Highest Degree	2015; Geography
Professional Experience	Geographic Information Science, geovisualization, big data analytics, Web-GIS and cartography, quantitative methods, geography of food and health, urban and environmental modeling, China

- C. List the resources needed to sustain the program for the first five years, including cost and funding source.

Faculty time to teach 4 seminars (2 in fall and 2 in spring). Total cost is \$20,592 (or \$5148 per class) □ Graduate student TA monies for 2-3 students. Total cost ~\$7000 per year. We do not anticipate the need for additional resources.

- D. Additional support resources required, including source of support.

This is an interdisciplinary MA degree which allows students to take 400/500/600 level courses from other departments on campus. Courses that are already offered each Fall or Spring. The four seminars to be run in geography and planning (three in Fall and one in Spring) will require that those instructors be removed from teaching a section of GE and thus be replaced by a lecturer. Total MA program to cost ~\$20,000 per year.

VI. Curriculum

Note: Proposed curriculum should take advantage of courses already offered in

other departments when subject matter would otherwise overlap or duplicate existing course content.

- A. Total number of units required for option.

30

- B. Special criteria for admission and/or continuation.

Prerequisites for Admission to Conditionally Classified Status

1. Satisfactory grade point average as specified in "Admission to Master's Degree Programs" in the University Catalog. Students with less than a 3.0 GPA are not normally admitted.
2. Approval by the Department and the Office of Graduate Studies.
3. An acceptable baccalaureate from an accredited institution, or an equivalent approved by the Office of Graduate Studies. Appropriate academic preparation are a bachelors degree with a major or minor in geography or equivalent. All students who have not completed the transfer equivalent of GEOG 315 Applied Statistics in Geography and GEOG 211 Introduction to GIS, must take these courses in addition to the 30 units required for the degree.

Students not holding acceptable degrees, but determined by the department as acceptable candidates, are required to complete the 9 units of qualifying course work or the equivalent described below. Students holding acceptable degrees but lacking specific courses are required to complete qualifying course work. Qualifying course work shall not be counted as units toward the master's degree.

3 units of Physical and Environmental Geography at the 300/400-level;
3 units of Human Geography and Planning at the 300/400-level;
3 units of Techniques in Geography at the 300/400-level.

The Graduate Advisor will determine the equivalency of undergraduate courses.

Conditionally classified students are expected to complete all courses with no grade lower than a B- and finish all coursework within the semester of enrollment (no "incomplete" or "report in progress").

Prerequisites for Admission to Classified Status:

In addition to any requirements listed above:

1. Development of an approved program in consultation with the Graduate Advisor. Students must complete the development of an approved course work program within the first semester of enrollment.
2. At least twelve units of 600-level coursework are required for advancement to classified status.

3. With exception to the above, students who are required to complete qualifying courses must complete them by the end of the second semester in the program.

- C. Explanation of any special program characteristics (e.g., terminology, credit units required, types of coursework, etc.).

Not Applicable

- D. List all new courses for the proposed program.

1. We propose no new courses for this program. However, we propose to rename a course (GEOG 601) and modify the associated catalog description to reflect the purpose of that class.

- E. List all required courses for the program.

Five Courses Required:

GEOG 601	Applications in Environmental Policy and Planning	3.0
SP		
GEOG 604	Planning Practice and Theory	3.0
FA		
GEOG 605	Applied Geography	3.0
FA		

BIOL/GEOG 660	Landscape Ecology	3.0
FA		

Prerequisites: College level biology, Earth science, or physical geography courses; MATH 314 or MATH 350 or GEOG 315 or equivalent.

And at least one of the following

GEOG 689	Geography Internship	1.0-3.0	SP
<i>Prerequisites: Successful completion of GEOG 604, 605, 660.</i>			
GEOG 697	Independent Study	1.0-3.0	SP
<i>Prerequisites: Successful completion of GEOG 604, 605, 660.</i>			
GEOG 699T	Master's Thesis	1.0 – 6.0	SP
<i>Prerequisites: Successful completion of GEOG 601, 604, 605, 660.</i>			

- F. List all elective courses for the program.
 Course number and title
 Units of credit

Optional Course:

GEOG 689T	Supervised College Teaching	2.0-4.0	FS
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Policy and Economics 2 selected from:

ECON 476	Issues in Global Environment and Development	3.0 SP
Prerequisites: ECON 301.		
ECON 466	Environmental and Natural Resource Economics	3.0 FA
Prerequisites: ECON 301		
POLS 653	Environmental Policy & Law ←	3.0 INQ
POLS 660A	Seminar in Public Management	3.0 FA
POLS 667	Seminar in Administration and Planning	3.0 FS

Resources and Planning 1 course selected from:

ANTH 487	Heritage Resource Planning	3.0 INQ
GEOG 405s	Nature and Restoration	3.0 FA
<i>Prerequisites: GEOG 101, GEOG 102, and GEOG 390 or equivalents. Recommended: GEOG 343, GEOG 444, GEOG 445, or PSSC 330.</i>		
BIOL 436	Waterfowl Biology and Wetland Management	3.0 FA
GEOG 425	Planning for Sustainable Communities and Regions	3.0 F1
GEOG 427	Environmental Impact Analysis	3.0 SP
<i>Prerequisites: GEOG 320 or equivalents</i>		
GEOG 428	Site Planning	3.0 S2
<i>Prerequisites: GEOG 219 and GEOG 320, or equivalent.</i>		
GEOG 436	Transportation Analysis and Planning	3.0 F2
Prerequisites: GEOG 301, GEOG 320, or faculty permission.		
GEOG 426	Water Resource Policy and Planning	3.0 SP
<i>Prerequisites: GEOG 101 or equivalent. Recommended: GEOG 304, GEOG 343</i>		
GEOG 429	Environmental and Conservation Planning	3.0 S1
<i>Prerequisites: GEOG 211, GEOG 219 or equivalents; GEOG 320. Recommended: GEOG 101 or GEOS 130.</i>		
GEOG 444	Biogeography and Landscape Ecology	3.0 S2

Prerequisites: GEOG 101, GEOG 211, GEOG 343, GEOG 390 or equivalents. Recommended: BIOL 152, BIOL 350, GEOG 315.

GEOG 445 Pyrogeography 3.0 S1

Prerequisites: GEOG 101; AGRI 331, BIOL 350, BIOL 414, GEOG 343, GEOG 405S, GEOG 444, or PSSC 330.

GEOG 506S Community Service Practice in Geography 3.0 FA

Prerequisites: GEOG 102, 105, 106, or SOSC 301; GEOG 320, GEOG 390.

GEOS 410 Introduction to Watershed Hydrology 3.0 SP

Prerequisites: GEOS 380 or prior hydrology course work and consent of instructor.

GEOS 536 Applied Ecology 3.0 SP

Prerequisites: BIOL 350.

PSSC 451 Soil Genesis and Classification 3.0 F1

Prerequisites: PSSC 250.

PSSC 453 Soil Fertility and Plant Nutrition 3.0 F2

Prerequisites: PSSC 250.

RECR 440 Environmental and Comprehensive Planning for Recreation 3.0 FS

Prerequisites: RECR 200, concurrent enrollment in or prior completion of RECR 240 and RECR 300, completion of computer literacy requirement, or faculty permission.

RECR 446 Natural Resources Management 3.0 FA

Prerequisites: RECR 240, RECR 300, or faculty permission.

Geospatial Techniques 1 course selected from:

GEOG 418 Remote Sensing of Environment 3.0 SP

Prerequisites: GEOG 211 and GEOG 315, or MATH 105 or equivalents.

GEOG 413 Advanced Cartography and Geovisualization 3.0 SP

Prerequisites: GEOG 211 (may be taken concurrently), GEOG 313.

GEOG 411 Spatial Analysis and Modeling in GIS 3.0 SP

Prerequisites: GEOG 211, GEOG 311 (may be taken concurrently), and GEOG 315.

G. Writing Requirement

Geography master's degree students will demonstrate their writing competence by successfully completing writing in each of their seminars.

A copy of this work will be placed in the student's department file to form a portfolio of work. Satisfactory completion of Geography 604, 605 and 660 will merit the fulfillment of the writing proficiency requirement.

- H. For a graduate option, indicate the culminating activity for the option and/or degree program.

The Masters by Examination plan is designed for students seeking a practical coursework professional experience for degree completion with a set of three focused written comprehensive exams based on a synthesis of topics derived from the required seminar coursework (GEOG 604, 605, and 660) from the first semester unless otherwise outlined in the student's coursework plan. Exams will be completed in Spring semester, and will demonstrate the candidate's knowledge, skills, and problem-solving capabilities over several conceptual and technical areas as determined by the participating seminar course instructors. Exams will be graded as pass or fail. Students who fail an examination will be given one make up exam prior to the end of that spring semester. Satisfactory completion of all exams is necessary to fulfill the culminating experience for this plan.

The Masters by Thesis plan is intended for research-oriented students seeking preparation in pursuit of a doctoral degree. The candidate shall submit an acceptable thesis based upon research developed by the student in coordination with their committee chair. Students intending to pursue a thesis will be required to obtain agreement with their desired committee chair and graduate committee after completion of the second semester of coursework prior to admission change to the thesis program track. Serious candidates will be evaluated following their first semester to determine their aptitude for completing a thesis, and following the second semester to evaluate progress and their submitted research proposal. Given favorable evaluation the candidate must work with their committee chair to develop a work plan to outline targets for work completion inclusive of the development of a thesis proposal, oral presentation of the research, and submission of an approved thesis to the Office of Graduate Studies within the established timeframe. Students completing the thesis plan must enroll in at least one unit, but no more than 6 units of GEOG 699T as part of their program.

- I. Complete catalog copy, including full degree requirements (i.e., a catalog description of the full degree program, not just the option being proposed), and admission and completion requirements. See the current University Catalog for correct format; please follow it exactly. Before the proposal is submitted to Academic Affairs (for undergraduate options) or to the Office of Graduate Studies (for graduate program options), it may be helpful to review catalog copy with Academic Publications.

- J. For undergraduate programs, include a Major Academic Plan (MAP) with the proposal. If you have questions or need help, contact Academic Advising Programs.

Attach the Undergraduate Program Signature form or the Graduate Program Signature form to the front of the proposal and submit to Academic Affairs or the Office of Graduate Studies after all department and college reviews are complete.

From: [Sharon A Barrios](#)
To: [Nicol Gray](#)
Subject: RE: Discontinue MA Geography
Date: Friday, September 8, 2017 11:05:08 AM

Hi Nicol:

We had our Graduate Council meeting today and the discontinuation of the MA in Geography was on our agenda. We accepted the discontinuation, so please do move it on to EPPC. Thank you!

Sharon

Sharon Barrios, PhD
Interim Dean
Office of Graduate Studies
Professor of Political Science
California State University, Chico
Student Services Center (SSC) 460
(530) 898-4473

From: Nicol T Gray
Sent: Wednesday, August 16, 2017 12:58 PM
To: Sharon A Barrios
Subject: Discontinue MA Geography

Hi Sharon,

Here is the proposal to Discontinue the MA in Geography for you and Grad Council to review/approve. Please let me know when it is OK to submit to EPPC.

Thank you,

Nicol Gray
Curriculum Coordinator
Office of the Vice Provost for Academic Programs
Student Services Center 464B
California State University, Chico
Chico, CA 95929-0128
(530) 898-4923