



THE UNIVERSITY *of*  
NEW MEXICO

Office of the Vice Provost for Academic Affairs  
MSC05 3400  
1 University of New Mexico  
Albuquerque, NM 87131-0001  
505.277.2611

Date: 22 August 2012

To: Dr. Scott Freundsuh, Chair, Department of Geography and Environmental Studies

Re: Pre-approval for Graduate Certificate in Law, Environment, & Geography

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Thank you for submitting the following department of Geography proposal for a Graduate Certificate in Law, Environment, and Geography for review by the Office of the Provost. In my judgment, the proposed certificate course has been sufficiently well developed to warrant submission to the Faculty Senate Curricula Committee, please feel free to proceed.

Sincerely,

Dr. Gregory L. Heileman  
Associate Provost for Curriculum

Cc: Chaouki Abdallah, Interim Provost and EVP for Academic Affairs  
Nancy Middlebrook, University Accreditation Director  
Elizabeth Barton, Associate Registrar  
John Carr, J.D., Ph.D., Assistant Professor, Geography

Received

SEP 26 2014

Graduate Office  
University of New Mexico

Received

OCT 17 2014

Graduate Office  
University of New Mexico

**NEW GRADUATE DEGREE OR GRADUATE CERTIFICATE  
FORM D**

**UNIT PREPARES IN QUADRUPPLICATE**  
Route as indicated below under approvals. Return to the Registrar's Office once all signatures have been obtained.

Date: Sept 11, 2012

John Carr  
(Name of individual initiating Graduate Degree or Graduate Certificate)

Assistant Professor  
(Title, position, telephone number)

Carrj@unm.edu  
(Email address)

Geography & Environment Studies  
(Department/Division/Program)

\*Allow up to one year for the process to be completed for a certificate, and 18 months for a degree.

Note: Proposals for new graduate degrees or graduate certificates need to follow an approved format. Please call the Office of Graduate Studies and ask for an outline. Revisions of graduate degrees and some new certificates also may need state approval, depending on the extent of changes proposed. Please consult the Office of the Provost for advice prior to initiating this form.

Attach the following required documents:

1. Executive Summary.
2. Program Proposal (in the approved format).
3. Catalog Description (to include program curriculum).
4. Graduate Program Projected Costs (only for new degrees).
5. Library Impact Statement.

Does this new degree affect any existing program? Yes  No  If yes, attach statement.

Proposed date to admit new students: Term Fall Year 2013

**Required Signatures:**

Department Chair	<u>Scott Furbel</u>	Date	<u>9/11/2012</u>
College Curricula Committee	<u>James Marshall</u>	Date	<u>12/4/2012</u>
College or School Dean	<u>Paul Chung</u>	Date	<u>11/31/13</u>
Dean of Library Services	<u>Michael</u>	Date	<u>2/14/14</u>
Office of the Registrar—Catalog	<u>Elizabeth H. Baxton</u>	Date	<u>09/26/14</u>
FS Graduate Committee	<u>Judy Jusals</u>	Date	<u>10/16/14</u>
Dean of Graduate Studies		Date	
FS Curricula Committee	<u>Cecilia Montoya</u>	Date	<u>11/11/14</u>
Office of the Provost	<u>Jay L. H.</u>	Date	<u>11/12/14</u>
Faculty Senate		Date	
Board of Regents		Date	

**Additional Approvals for Degrees:**

Board of Regents		Date	
Council of Graduate Deans		Date	
Academic Council of Higher Education		Date	
Higher Education Department		Date	
State Board of Finance		Date	

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Entered Catalog

For Registrar's Office ONLY:

Copies Mailed

## DEPARTMENT OF GEOGRAPHY & ENVIRONMENTAL STUDIES

### PROPOSAL FOR GRADUATE CERTIFICATE IN “LAW, ENVIRONMENT, AND GEOGRAPHY”

#### **Executive Summary:**

Seeking to capitalize on a nationally unparalleled departmental strength in legal and environmental geography, the Department of Geography proposes to create a new, one-year graduate certificate in Law, Environment and Geography. In the past six years, the Department has added 9 new faculty, and has engaged in an ongoing strategic planning process to both capitalize on these hires and to strengthen the department's position within the discipline and the region. The departmental recognition and commitment to a focus on Law, Environment, and Geography – including the proposed program – is a result of this strategic planning process

The Certificate in Law, Environment, and Geography seeks to provide students both tools and analytic frames for understanding the spatial and legal dimensions of environmental dynamics and challenges. While the law can be a powerful tool for addressing issues of environmental regulation and resource management, the ways we write and enforce our laws can substantially impact environmental dynamics. The spatial dimensions of these impacts, and the inherent spatiality of legal regulatory concerns are pressing concerns for environmental researchers and policy makers. By offering a curriculum that stresses these interconnections the Certificate in Law, Environment, and Geography empowers students to ask critical questions about the how human regulation and environmental dynamics play out at a variety of scales.

UNM's Department of Geography has a unique strength in that two of its eight faculty have J.D.'s and several other members of the faculty have expertise in legal history and natural resource management. The department is working to capitalize on this strength by creating a new graduate certificate using entirely existing campus resources and faculty. The primary goal of the project is provide new opportunities for undergraduate, graduate and law students at UNM who are interested in education and training in law and natural resource policy and management. Its secondary goal is to enhance the Department's reputation as a national leader in the growing field of legal geography.

The curriculum would be based upon already existing courses. Twelve Credit Hours would be taken from existing offerings within the Department of Geography and Environmental Studies. An additional six Credit Hours of electives would be required from a list of approved courses from American Studies, Economics, History, Community and Regional Planning, and the Law School. Because the curriculum depends solely on existing classes, and because the certificate program will likely involve a modest enrollment in the immediate future, the impact on existing courses should be fairly minimal.

There are no other even remotely similar programs offered in New Mexico public

or private institutions of higher learning.

The new program will appeal to (1) environmental, natural resources professionals who are either dealing with legal challenges through their work, or who want the program for promotion (2) undergraduate students seeking to enhance their credentials in preparation for studying environmental and/or natural resources law, and (3) undergraduates who are looking to enter into the environmental and natural resource management field professionally.

Because much of the curriculum is based upon existing course offerings, shifts faculty and course offerings both in the Department and across campus should not create additional faculty needs for the Certificate Program. No additional faculty or staff will be required, and there is no projected additional cost to the program.

## DEPARTMENT OF GEOGRAPHY & ENVIRONMENTAL STUDIES

### PROPOSAL FOR GRADUATE CERTIFICATE IN “LAW, ENVIRONMENT, AND GEOGRAPHY”

#### **Executive Summary:**

Seeking to capitalize on a nationally unparalleled departmental strength in legal and environmental geography, the Department of Geography proposes to create a new, one-year graduate certificate in Law, Environment and Geography. In the past six years, the Department has added 9 new faculty, and has engaged in an ongoing strategic planning process to both capitalize on these hires and to strengthen the department’s position within the discipline and the region. The departmental recognition and commitment to a focus on Law, Environment, and Geography – including the proposed program – is a result of this strategic planning process

The Certificate in Law, Environment, and Geography seeks to provide students both tools and analytic frames for understanding the spatial and legal dimensions of environmental dynamics and challenges. While the law can be a powerful tool for addressing issues of environmental regulation and resource management, the ways we write and enforce our laws can substantially impact environmental dynamics. The spatial dimensions of these impacts, and the inherent spatiality of legal regulatory concerns are pressing concerns for environmental researchers and policy makers. By offering a curriculum that stresses these interconnections the Certificate in Law, Environment, and Geography empowers students to ask critical questions about the how human regulation and environmental dynamics play out at a variety of scales.

UNM’s Department of Geography has a unique strength in that two of its eight faculty have J.D.’s and several other members of the faculty have expertise in legal history and natural resource management. The department is working to capitalize on this strength by creating a new graduate certificate using entirely existing campus resources and faculty. The primary goal of the project is provide new opportunities for undergraduate, graduate and law students at UNM who are interested in education and training in law and natural resource policy and management. Its secondary goal is to enhance the Department’s reputation as a national leader in the growing field of legal geography.

The curriculum would be based upon already existing courses. Twelve Credit Hours would be taken from existing offerings within the Department of Geography and Environmental Studies. An additional six Credit Hours of electives would be required from a list of approved courses from American Studies, Economics, History, Community and Regional Planning, and the Law School. Because the curriculum depends solely on existing classes, and because the certificate program will likely involve a modest enrollment in the immediate future, the impact on existing courses should be fairly minimal.

There are no other even remotely similar programs offered in New Mexico public or private institutions of higher learning.

The new program will appeal to (1) environmental, natural resources professionals who are either dealing with legal challenges through their work, or who want the program for promotion

(2) undergraduate students seeking to enhance their credentials in preparation for studying environmental and/or natural resources law, and (3) undergraduates who are looking to enter into the environmental and natural resource management field professionally.

Because much of the curriculum is based upon existing course offerings, shifts faculty and course offerings both in the Department and across campus should not create additional faculty needs for the Certificate Program. No additional faculty or staff will be required, and there is no projected additional cost to the program.

## **1. Program Description and Purpose**

*a. What is the program and why should we offer it? Include the program's major goals (both primary and secondary, if any).*

UNM's Department of Geography has a unique strength in that three of its eight faculty (eventually two of eight) have J.D.'s and several other members of the faculty have expertise in legal history and natural resource management. The department is working to capitalize on this strength by creating a new graduate certificate using entirely existing campus resources and faculty. The primary goal of the project is provide new opportunities for undergraduate, graduate and law students at UNM who are interested in education and training in law and natural resource policy and management. Its secondary goal is to enhance the Department's reputation as a national leader in the growing field of legal geography.

*b. How does the program fit within the unit's future plans?*

This proposed certificate is part of a broader Departmental effort to develop a focus in the area of Law, Environment, and Geography by capitalizing on existing campus-wide resources. This effort also includes a recently approved undergraduate minor in Law, Environment, and Geography, and a proposed "3/2" five-year combined economics undergrad major and geography minor and M.S. focused largely on future environmental managers. When and if these programs are all approved, further development toward a Joint JD & Masters in Geography will be explored.

*c. How does the program fit within the UNM mission and strategic plan?*

By creating a unique, professionally relevant, and intellectually rich educational path, the proposed plan would fit UNM's vision statement of:

- offering New Mexicans access to a comprehensive array of high quality educational, research, and service programs
- serving as a significant knowledge resource for New Mexico, the nation, and the world;
- and
- fostering programs of international prominence that will place UNM among America's most distinguished public research universities.

It would also capitalize on the strategic advantage articulated in that vision statement by capitalizing on UNM's location in a natural "laboratory for environmental, water, health, and other research and educational opportunities." Finally, it would offer an "area of marked distinction," as envisioned by UNM's Strategic Plan.

*d. How does the program fit with related offerings at UNM?*

At present, this offering would be unique on the UNM campus and in New Mexico. That said, it would offer a natural transition for undergraduate students in Sustainability, Biology, Engineering, and Community and Regional Planning who are considering a career in Law and/or Environmental Management.

*e. Assuming timely approval, what is the program development and implementation timeline?*

Assuming timely approval, the certificate could be developed and implemented by the time it is incorporated in the next University Catalog.

*f. Describe the curriculum (including coursework and other degree requirements). Discuss any new courses and the impact of the curriculum on existing courses, including courses in other departments.*

The curriculum would be based upon already existing courses. Twelve Credit Hours would be taken from existing offerings within the Department of Geography and Environmental Studies. An additional six Credit Hours of electives would be required from a list of approved courses from American Studies, Economics, History, Community and Regional Planning, and the Law School. All of these programs have been contacted and enthusiastically support the proposed curriculum. Because the curriculum depends solely on existing classes, and because the certificate program will likely involve a modest enrollment in the immediate future, the impact on existing courses should be fairly minimal.

The proposed curriculum for the program is as follows:

The Graduate Certificate in Law, Environment, and Geography requires 18 credit hours of upper-division course work.

REQUIRED GEOGRAPHY COURSE	Credit Hours
GEOG517 – Law and Geography	3

ELECTIVE GEOGRAPHY COURSES - 9 Credit Hours from the following offerings:

	Credit Hours
GEOG514 – Natural Resources Management	3
GEOG515 – Cultural and Political Ecology	3
GEOG561 – Environmental Management	3
GEOG562 – Water Resources Management	3
GEOG563 – Public Lands Management	3
GEOG564 – Food and Natural Resources	3

ELECTIVE NON- GEOGRAPHY COURSES - 6 Credit Hours from the following offerings:

	Credit Hours
AMST 520 – Topics in Environment, Science and Technology	3
AMST 523 – Environmental Justice	3
ECON 542 – Topics in Environmental, Resource, and Ecological Economics	3
ECON 545 – Water Resources II: Water Modeling	3
ECON 546 – Water Resources I: Contemporary Issues	3

HIST 633 – US Environmental History	3
HIST 638 – American Legal History	3
CRP 515 – Natural Resources Field Methods	3
CRP 527 - Watershed Management	3
CRP 532 – Foundations of Natural Resources	3
LAW 547 – Water Law	3
LAW 554 – Indian Water Law	3
LAW 565 – Natural Resources	3
LAW 575 – Western Water Policy	3
LAW 578 – Natural Resources: Indian Country	3
LAW 580 – Environmental Law	3
LAW 593 – Topics in Law*	3
LAW 635 – Land Use Regulation	3

\*Topics must be approved by Director of the Certificate Program in advance

All participating programs have been contacted and enthusiastically support the proposed curriculum. Supporting faculty contacts for these programs include:

- Alex Lubin: American Studies
- Bill Flemming: Community and Regional Planning
- Janie Chermak: Economics
- Reed Benson: Law
- Charlie Steen: History

## 2. Justification for the Program

### a. Evidence of Need

The Bureau of Labor Statistics' *Occupational Outlook Handbook 2010-2011* projects job growth for Social Scientists to be "much faster than average," which equates to more than a 20% increase between 2008-2018.<sup>1</sup> However, the growth projections vary, depending on the specific occupation. That same resource indicates that continued expansion of employment in the traditionally strong legal sector will be spearheaded by increasing demand for environmental law specialists. The UNM Geography & Environmental Study Program is well situated to capitalize upon these trends by providing a unique educational program that provides interested undergraduates with a clear path to graduate and/or law school and a distinct, employable degree. Moreover, faculty has encountered a number of undergraduate students who are looking for a career path that encompasses their interests in geography and environmental regulation who have expressed an interest in the proposed certificate program. Moreover there is a particularly strong need in New Mexico and the U.S. Southwest for professionals and researchers with experience in the areas of environmental law, regulation, and policy, given the region's longstanding challenges managing groundwater, and leadership in renewable energy resources.

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<sup>1</sup> <http://www.bls.gov/oco/ocos315.htm> (last accessed 11/05/2010).

*b. Duplication*

There are no other even remotely similar programs offered in New Mexico public or private institutions of higher learning. The only similar program available to New Mexico students through the WICHE professional student exchange or WICHE regional graduate program is the University of Colorado, Boulder's "Graduate Certificate in Environment, Policy, and Society." A statement of position regarding this proposal has been solicited from that program. While we have had some feedback from faculty in this program, nobody in the program could identify its Director or provide a formal position statement.

**3. Inter-institutional Collaboration and Cooperation**

At this time, there are no substantial opportunities for collaborative relationships with other institutions for shared instruction, faculty arrangements, or student experiences. Such opportunities will likely arise once the proposal is approved, and faculty members are actively teaching to graduate certificate students.

**4. Clientele and Projected Enrollments**

*a. Clientele*

The new program will appeal to (1) environmental, natural resources professionals who are either dealing with legal challenges through their work, or who want the program for promotion (2) undergraduate students seeking to enhance their credentials in preparation for studying environmental and/or natural resources law, and (3) undergraduates who are looking to enter into the environmental and natural resource management field professionally.

Admission requirements will parallel those for admissions requirements for admission to the existing Departmental masters program in the and will be based on a combination of academic records, either GRE or LSAT scores, and professional/life experience.

Recruitment will take place through the UNM Department of Geography and Environmental Studies website, through announcements on the UNM hosted "Legal Geography" listserv, and through periodic targeted emails to undergraduates at UNM and other appropriate academic programs in the region. Recruitment for the Certificate program will duplicate departmental efforts to reach underrepresented student populations within the state, thus contributing to preparing a diverse workforce.

*b. Projected Enrollment*

Enrollment in the new program has been projected for the first five years based on historic enrollment trends for the Geography graduate program as a whole. In the past six years, the Department has added 9 new faculty, and has engaged in an ongoing strategic planning process to both capitalize on these hires and to strengthen the department's position within the discipline and the region. The departmental recognition and commitment to a focus on Law, Environment, and Geography – including the proposed program – is a result of this strategic planning process.

Accordingly, we anticipate a similar rate of growth in enrollment for the first five years of the project as we have seen with the graduate program as a whole during this period of expansion. Graduate enrollments have steadily grown from 12 during 2008-2009 to 25 during 2011-2012, for an approximate 25% growth rate per year. Likewise, we base the ratio of returning students to new students on historical data from the graduate program as a whole, with approximately 25% of our graduate cohort made up of returning students. Because the program has historically drawn very few part-time students, we are likewise assuming that there will be few if any part time certificate students in the first five years. Finally, we assume a conservative and rough initial cohort of 5 students based on an estimate of existing grad students who would have likely been interested in pursuing the proposed certificate program.

Year	New Students	Returning Students	Full Time	Part Time	Student Credit Hours
1	4	1	5	0	90
2	5	1	6	0	108
3	6	2	8	0	144
4	7	3	10	0	180
5	8	3	11	0	198
TOTAL	30	10	40	0	720

## 5. Institutional Readiness for the Program

a. *How many faculty are necessary for program delivery?*

This program will rely upon two faculty members in the Department of Geography and Environmental Studies to offer core classes, and administer the program, Melinda Harm Benson and John Carr.

b. *How will this program affect the workload of current faculty and support staff?*

Because much of the curriculum is based upon existing course offerings, faculty and course offerings both in the Department and across campus should not create additional faculty needs for the Certificate Program. The program will increase the workload for the two faculty members primarily charged with running it, but this would be within the normal expectations for faculty service. There may be some small increase in staff workload in handling admissions matters, and entering appropriate information for tracking student progress through the program.

c. *Will additional faculty or staff be required? What is the cost?*

No additional faculty or staff will be required, and there is no projected additional cost to the program.

d. *Will any GA/TA positions be used to assist graduate faculty in the program?*

No GA/TA positions be needed to assist graduate faculty in the program, unless faculty decide to seek grant funding for such positions.

e. *What faculty and staff development services will be needed?*

No additional faculty and staff development services will be needed.

f. *What technology, media, equipment and instructional supplies are needed to support the program's intended outcomes? Are these resources available? What is the estimated cost?*

There will not be any need for additional technology, media, equipment or instructional supplies to support the program's intended outcomes.

g. *Are there any needs for additional or renovated space?*

There will not be any need for additional or renovated space

h. *What, if any, existing external facilities will be used?*

No existing external facilities will be used.

## **6. Projected Cost of the Program**

Because the program is based entirely on existing course offerings and existing faculty service, there are no projected program costs, new revenue sources needed, or course fees or other expenses for students to cover. Thus, for each of the first five years of the program, no program costs are anticipated, nor is there any anticipated state support based on the state funding formula or any other areas of support.

## **7. Quality of the Program**

a. *Describe the qualifications of the faculty and how the expertise and experience will contribute to the quality of the program.*

As mentioned above, UNM's Department of Geography has a unique strength in that three of its eight faculty have J.D.'s (Professors Harm Benson, Carr, and Olen Paul Matthews) and several other members of the faculty have expertise in legal history and natural resource management. This concentration of geographers with legal degrees is unmatched nationally. Moreover, the growing strength of programs across the UNM Campus that focus on environmental and sustainability issues will ensure that Graduate Certificate students receive an outstanding quality education.

b. *Show how the proposed admission standards (identified in Section 1) compare with those of other institutions offering a similar program.*

The admission standards for the Graduate Certificate, which will parallel those for the existing Masters Degree program, will help ensure the quality of the program by limiting admissions to particularly strong candidates. These standards are in keeping with the nearest comparable program, namely the University of Colorado, Boulder's "Graduate Certificate in Environment, Policy, and Society" which requires admission to an existing graduate or pre-professional degree at UC Boulder for admission to the Certificate program.

c. *What instructional model(s) will be used in presenting the program? What types of*

*technology will be used for delivery of instruction?*

The program will piggyback on existing departmental graduate program instructional models, as it is premised on existing offerings.

*d. What types of opportunities for experiences outside of the classroom will be available to students and utilized in the program (e.g., internships, service learning projects, research-based service learning)?*

The opportunities for experiences outside the classroom for students will likewise parallel such opportunities in existing offerings.

*e. What student support services are likely to be needed and to what extent (CAPS, library, ITS, advising, etc.)? What is the estimated cost?*

We project the proposed program will impose a minimal requirement on student support services, with no additional student support costs.

*f. What student support will be needed (GA & TA positions, scholarships, internships, etc.)? There will not be a requirement for student support.*

*g. What are the expected student learning outcomes for the program? What will the students know and what will they be able to do when they complete this program?*

Student learning outcomes will include the following:

- A.1. Students will identify appropriate environmental issue for research
- A.2. Students will use legal research
- B.1. Students will State how a LEG research project fits within the relevant literature
- B.2. Students will explain and assess their research

*h. How will the program's learning outcomes be measured?*

These learning outcomes will be measured by an evaluation of the final research project in the capstone course. This will serve as the final integrating experience that will be used to assure graduates have acquired the knowledge and skills expected for the certificate awarded.

*i. Statement regarding accreditation.*

UNM is institutionally accredited by the Higher Learning Commission of the North Central Association and has approval to offer any degree program appropriate to UNM's mission. There will be no additional accreditation sought for the program, and thus there will be no additional accreditation processes or costs. Nor is the program projected to affect any existing accreditation or licensure requirements.

## **8. Assessment of Operations and Impact**

In addition to student learning outcomes, the Department will conduct periodic evaluations of where Certificate Program graduates are placed, and conduct informal surveys of graduates.

As part of the Department's current long-range plan for assessment, the Certificate Program will be included in the annual "Assessment Committee" analysis and reporting process.

This committee is charged with the annual gathering and analysis of assessment data for all degrees and programs offered by the Department of Geography and Environmental Studies, including a quantitative analysis of capstone projects such as those that will be used to measure the program's learning outcomes. This process will continue for the next five years and beyond.

#### **9. Administrative Responsibility for the Program and Institutional Commitment**

The governance of the program will be handled by the two primary faculty members, with annual reporting to, and oversight by the faculty of the Department of Geography and Environmental Studies as a whole.

## **Graduate Certificate in Law, Environment, and Geography**

Program Director: John Carr

The Certificate in Law, Environment, and Geography seeks to provide students both tools and analytic frames for understanding the spatial and legal dimensions of environmental dynamics and challenges. While the law can be a powerful tool for addressing issues of environmental regulation and resource management, the ways we write and enforce our laws can substantially impact environmental dynamics. The spatial dimensions of these impacts, and the inherent spatiality of legal regulatory concerns are pressing concerns for environmental researchers and policy makers. By offering a curriculum that stresses these interconnections the Certificate in Law, Environment, and Geography empowers students to ask critical questions about the how human regulation and environmental dynamics play out at a variety of scales.

### **Admission requirements and qualifications**

Students must be either

- currently enrolled in one of the graduate programs in the School of Arts and Sciences, with a minimum GPA of 3.0;
- possess a professional degree in geography, law, environmental science, or environmental management; or
- graduate students currently enrolled in other programs, and individuals without one of the degrees listed in #2 may be admitted by the Certificate Director upon demonstration of adequate preparation, skills, and aptitude.

Students who are not currently enrolled as degree seeking graduate students at the University must apply to and be accepted for admissions by the Department of Geography and Environmental Studies.

Application deadlines for the Certificate in Law, Environment, and Geography are: November 1 for the Spring semester and March 1 for the Fall semester.

### **Application submission requirements**

- A Curriculum Vitae
- A statement of intent outlining your goals in pursuing the Certificate, proposed program of studies, and schedule for completion.
- A writing sample of no more than five 8.5"-x11" pages.
- A current academic transcript.
- Either GRE or LSAT scores from the previous five years.
- Names and contact information for two people who can speak to your qualifications for the certificate program.

These materials should demonstrate (1) serious initial investigation and/or interest in environmental law and/or regulatory issues, (2) strong academic credentials, (3) ability to write cogently, and (4) a clear and compelling set of goals.

The director for the graduate certificate in Certificate in Law, Environment, and Geography may waive any of the above requirements if the application as a whole demonstrates that the student has the skills, background, and ability to successfully complete the Certificate.

### Curriculum Core Requirements

The Graduate Certificate in Law, Environment, and Geography requires 18 credit hours of upper-division course work.

A. REQUIRED GEOGRAPHY COURSE	Credit Hours
GEOG517 – Law and Geography	3

B. ELECTIVE GEOGRAPHY COURSES - 9 Credit Hours from the following offerings:	Credit Hours
GEOG514 – Natural Resources Management Seminar	3
GEOG515 – Cultural and Political Ecology	3
GEOG561 – Environmental Management	3
GEOG562 – Water Resources Management	3
GEOG563 – Public Lands Management	3
GEOG564 – Food and Natural Resources	3

ELECTIVE NON- GEOGRAPHY COURSES - 6 Credit Hours from the following offerings:	Credit Hours
AMST 520 – Topics in Environment, Science and Technology	3
AMST 523 – Environmental Justice	3
ECON 542 – Topics in Environmental, Resource, and Ecological Economics	3
ECON 545 – Water Resources II: Water Modeling	3
ECON 546 – Water Resources I: Contemporary Issues	3
HIST 633 – US Environmental History	3
HIST 638 – American Legal History	3
CRP 515 – Natural Resources Field Methods	3
CRP 527 - Watershed Management	3
CRP 532 – Foundations of Natural Resources	3
LAW 547 – Water Law	3
LAW 554 – Indian Water Law	3
LAW 565 – Natural Resources	3
LAW 575 – Western Water Policy	3
LAW 578 – Natural Resources: Indian Country	3
LAW 580 – Environmental Law	3
LAW 593 – Topics in Law*	3
LAW 635 – Land Use Regulation	3

\*Topics must be approved by Director of the Certificate Program in advance

All electives should be chosen in consultation with the Certificate Director.

Only 3 hours of coursework taken as Credit/No Credit may be applied towards the Certificate.

DEPARTMENT OF GEOGRAPHY & ENVIRONMENTAL STUDIES

PROPOSAL FOR GRADUATE CERTIFICATE IN "LAW, ENVIRONMENT, AND  
GEOGRAPHY"

**Library Impact Statement**

Because the proposed program is based on existing courses and curricular material, no additional impact on library resources is anticipated.

## DEPARTMENT OF GEOGRAPHY & ENVIRONMENTAL STUDIES

### PROPOSAL FOR GRADUATE CERTIFICATE IN “LAW, ENVIRONMENT, AND GEOGRAPHY”

#### Formal Needs Assessment

The Bureau of Labor Statistics' *Occupational Outlook Handbook 2010-2011* projects job growth for Social Scientists to be “much faster than average,” which equates to more than a 20% increase between 2008-2018.<sup>1</sup> However, the growth projections vary, depending on the specific occupation. That same resource indicates that continued expansion of employment in the traditionally strong legal sector will be spearheaded by increasing demand for environmental law specialists. The UNM Geography & Environmental Study Program is well situated to capitalize upon these trends by providing a unique educational program that provides interested undergraduates with a clear path to graduate and/or law school and a distinct, employable degree. Moreover, faculty has encountered a number of undergraduate students who are looking for a career path that encompasses their interests in geography and environmental regulation who have expressed an interest in the proposed certificate program. Moreover there is a particularly strong need in New Mexico and the U.S. Southwest for professionals and researchers with experience in the areas of environmental law, regulation, and policy, given the region's longstanding challenges managing groundwater, and leadership in renewable energy resources.

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<sup>1</sup> <http://www.bls.gov/oco/ocos315.htm> (last accessed 11/05/2010).

DEPARTMENT OF GEOGRAPHY & ENVIRONMENTAL STUDIES

PROPOSAL FOR GRADUATE CERTIFICATE IN "LAW, ENVIRONMENT, AND  
GEOGRAPHY"

**List of similar programs (state and regional).**

University of Colorado, Boulder: "Graduate Certificate in Environment, Policy, and  
Society."

DEPARTMENT OF GEOGRAPHY & ENVIRONMENTAL STUDIES

PROPOSAL FOR GRADUATE CERTIFICATE IN "LAW, ENVIRONMENT, AND GEOGRAPHY"

**Graduate Program Projected Costs**

Because the proposed program is based on existing courses and curricular material, and will be administered by existing faculty and staff as part of their normal workload, no additional program costs are anticipated.

DEPARTMENT OF GEOGRAPHY & ENVIRONMENTAL STUDIES

PROPOSAL FOR GRADUATE CERTIFICATE IN “LAW, ENVIRONMENT, AND GEOGRAPHY”

**List of Potential Employers**

- Law Firms
- Engineering Firms
- Environmental Firms
- Environmental Compliance Departments of Private Industries
- US Forest Service
- US Parks and Wildlife
- Environmental Protection Agency
- State Parks Departments
- State and Federal Level Legislative Staff
- Environmental Non-Governmental Organizations



## Department of Economics

Date: November 8, 2012

To: John Carr

From: Janie M. Chermak, Chair of Economics

A handwritten signature in black ink, appearing to read "Janie M. Chermak".

RE: Law, Environment, And Geography Graduate Certificate

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The UNM Department of Economics supports the Department of Geography's proposal for the creation of a one-year graduate certificate. The proposed certificate can provide students with a unique specialization in legal geography and analytic tools for policy analysis. Because of its interdisciplinary nature, the program provides the potential for additional synergies between several departments, through course work and faculty collaboration.

**From:** Ric Richardson <jrich@unm.edu>  
**Date:** August 3, 2012 11:02:11 AM MDT  
**To:** John Carr <carrj@unm.edu>  
**Cc:** Bill Fleming <fleming@unm.edu>  
**Subject:** **Re: Geography Grad Certificate Proposal**

Hi John,

Thank you for the update. Your certificate proposal looks great and you have my support as always. In terms of the CRP courses, I'd like you to visit with Bill Fleming about courses to be listed from CRP. For instance, the CRP 524 course is not presently being offered and because we've hired a new faculty member, we're offering other really interesting electives. Our new faculty member is Caroline Scruggs, who has her PhD from Stanford in their interdisciplinary environmental policy program. She is terrific and I'd like you to meet her. I don't recall if you and I talked about Bill's role as coordinator of CRP's concentration in natural resources. Bill should be listed as the contact person in CRP.

Also, on the news front, Teresa Cordova retired from UNM and accepted a prestigious position directing the Great Cities Institute at UIC, and I've been appointed Director of the CRP program. So I'm up to my ears in a new life at UNM.

Let's find time to catch up. Coffee or lunch would be great.

My best,

Ric

Aug 2, 2012, at 9:59 AM, John Carr wrote:  
Ric,

I am writing to update you about the status of a Grad Certificate that I discussed with you about two years ago. As you may remember, the Geography Department is putting together a proposal for a one-year Certificate in Law, Environment, and Geography. As part of our proposal, we have included a number of CRP courses as electives for this certificate. And you had graciously supported this proposal in principle.

After a fair amount of administrative wrangling, we are within a week or so of submitting this to the Faculty Senate. Before we do so, however, I wanted to give you a chance to look over our proposal for any feedback you may have before we formalize our submission. I have attached the current draft for your review.

Thank you again for your support of our efforts.

I hope that you are enjoying a restful and engaging summer!

Cheers!!!

John Carr, J.D., Ph.D.  
Assistant Professor  
Department of Geography  
University of New Mexico

<LEG Grad Certificate Proposal 01.doc>

**From:** Gabriel Melendez <gabriel@unm.edu>  
**Date:** August 17, 2012 3:02:01 PM MDT  
**To:** John Carr <carrj@unm.edu>  
**Subject:** **Re: Geography Grad Certificate Proposal**

John-- American Studies is fine with the proposed certificate.

GM

On Aug 9, 2012, at 10:47 AM, John Carr wrote:  
Many thanks!

Cheers,

John

On Aug 9, 2012, at 10:07 AM, Gabriel Melendez wrote:  
Hi John-- I am forwarding the proposal to the department's executive committee for review. I will get back to you once the committee has weighed in on this matter.

Best,  
On Aug 6, 2012, at 1:57 PM, John Carr wrote:  
Professor Melendez,

About two years ago, Alex Lubin and I began discussing the Geography Department's proposal for a one-year Grad Certificate in Law, Environment, and Geography. We had wanted to include a number of American Studies courses as electives for this certificate, and Alex had supported this proposal in principle.

After a fair amount of administrative wrangling, we are within a week or so of submitting this to the Faculty Senate. Before we do so, Alex suggested that I give you an opportunity -- as acting Chair of American Studies -- to look over our proposal for any feedback you may have before we formalize our submission. I have attached the current draft for your review. My previous correspondence with Alex is also copied below.

Thank you in advance for considering our proposal.

Cheers!

John Carr

<LEG Grad Certificate Proposal 02.doc>

Begin forwarded message:

**From:** Alex Lubin <[alubin@unm.edu](mailto:alubin@unm.edu)>

**Date:** August 2, 2012 10:38:01 AM MDT

**To:** John Carr <[carrj@unm.edu](mailto:carrj@unm.edu)>

**Subject: Re: Geography Grad Certificate Proposal**

Dear John,

This looks fine to me; but since i'm on leave from UNM until Fall 2013, I think it would be best to discuss this with Gabriel Melendez, the current Chair of American Studies.

Regards,  
Alex

On Aug 2, 2012, at 8:57 AM, John Carr wrote:  
Alex,

I am writing to update you about the status of a Grad Certificate that I discussed with you about two years ago. As you may remember, the Geography Department is putting together a proposal for a one-year Certificate in Law, Environment, and Geography. As part of our proposal, we have included a number of American Studies courses as electives for this certificate. And you had graciously supported this proposal in principle.

After a fair amount of administrative wrangling, we are within a week or so of submitting this to the Faculty Senate. Before we do so, however, I wanted to give you a chance to look over our proposal for any feedback you may have before we formalize our submission. I have attached the current draft for your review.

Thank you again for your support of our efforts.

Cheers!

John Carr, J.D., Ph.D.

Assistant Professor  
Department of Geography  
University of New Mexico

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Alex Lubin  
On leave, University of New Mexico  
Associate Professor  
American Studies

John Carr, J.D., Ph.D.  
Assistant Professor  
Department of Geography  
University of New Mexico

A. Gabriel Meléndez  
Chair of American Studies  
419 Humanities Bldg.  
phone: 277-6357  
messages: 277-3929  
[gabriel@unm.edu](mailto:gabriel@unm.edu)

John Carr, J.D., Ph.D.  
Assistant Professor  
Department of Geography  
University of New Mexico

A. Gabriel Meléndez

Chair of American Studies

419 Humanities Bldg.

phone: 277-6357

messages: 277-3929

[gabriel@unm.edu](mailto:gabriel@unm.edu)

To: Diane L. Marshall, Associate Dean for Curriculum and Instruction  
 From: John Carr  
 Re: Form D for Graduate Certificate in "Law, Environment, and Geography".  
 Date: October 31, 2012

Please find below and attached our responses to your requests for minor modifications to the Form D to address the questions of the College Curriculum Committee

1. How often are relevant courses in the Law School offered? You might include some information from the course availability in the last couple of semesters.
  - a. The following information has been provided by Assistant Dean William Jackson, Registrar for the Law School:

School of Law courses are typically grouped by likelihood of the frequency of offering:

<u>Group A – a course likely to be offered each year</u>	<u>Last offered</u>
LAW 547 – Water Law	3 Fall 2012 - Benson
LAW 565 – Natural Resources	3 Fall 2011 - Benson
LAW 580 – Environmental Law	3 Fall 2011 - Gauna
LAW 593 – T: Intro to Natural Resources	2 Spr 2012 - Benson
<u>Group B – a course likely to be offered every other year</u>	<u>Last offered</u>
LAW 575 – Western Water Policy	3 Fall 2010 - Fort
LAW 578 – Natural Resources: Indian Country	2 Fall 2011 - adjunct
LAW 576 – Energy Law	3 Spr 2007 - Gauna
<u>Group C – a course likely to be offered less than every other year.</u>	<u>Last offered</u>
LAW 615 – Environmental Justice	3 Fall 2007 - unknown
LAW 536 – Endangered Species	3 - Spr 2008 - Fort
LAW 554 – Indian Water Law	3 Fall 2010 - adjunct
LAW 574 – Federal Public Lands and Resources Law	3 Spr 2007 - Fort
Other special topic courses to be offered in 2013-2014	
LAW 574 – Natural Resources Litigation Drafting	2 Spr 2013 - adjunct

2. Are seats available in these courses in the Law School for your proposed students? Some information on recent enrollment patterns in these courses would help.
  - a. According to Assistant Dean William Jackson, Registrar for the Law School, seats are typically available. The one reservation he noted is that LAW 575 "is sometimes offered as a seminar and then may have a restriction on the non-law students as the cap is typically 12."
  - b. Historic registration data from the last 7 semesters has been provided by Assistant Dean Jackson:

	LAW	2009 FALL	2010 SPR	2010 FALL	2011 SPR	2011 FALL	2012 SPR	2012 FALL
Water Law (3)	547	29		17		39		31
Natural Resources (3)	565	13		8		19		
Environmental Law (3)	580		23		15	20		
Intro to Natural Resources	593						31	
Western Water Policy	575			5				
Natural Resources Indian Country	578	11		5		8		
Energy Law	576							
Environmental Justice (2-3)	615							
Indian Water Rights (2-3)	554			8				
Federal Public Land & Resource Law (3)	574							

3. Are the courses that are required offered with sufficient frequency that the certificate can be completed in one year? Give some information from the last couple of semesters about course availability.
  - a. All required courses are projected to be offered on at least an annual basis for the next 5 years and beyond. Please see attached departmental course rotation. Please note that the attached rotation is an evolving document that is regularly revised to adjust for faculty leave, curricular needs, etc. That said, this tool is used to ensure that all core required courses will be covered for at least five years into the future.
4. Include emails/memos showing support from all of the departments that would be providing courses.
  - a. All support emails are attached hereto.
5. Please revise your assessment plan to say that “students will” do the expected outcomes, not that they will be able to (but perhaps not actually) do them.

- a. This change has been made in the newly updated draft of the Graduate Certificate Proposal, attached hereto