

**Department of Geography
University of Nevada, Reno**

MS in Geography
MS in Land Use Planning Policy
PhD in Geography

**Graduate
Student
Handbook**

2011 – 2012

Revised August 2011

This *Graduate Student Handbook* provides information on the graduate programs in UNR's Department of Geography. For any further questions or clarifications, students should contact their advisor or the Graduate Program Director – Gary Hausladen, hausl@unr.edu, or the Department Chair, Paul Starrs, starrs@unr.edu.

Geography Department Webpage -- <http://www.unr.edu/geography/>

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Welcome to the **DEPARTMENT OF GEOGRAPHY** at the University of Nevada, Reno. The Department offers a Master of Science (MS) and a Doctor of Philosophy (PhD) in Geography and an MS in Land Use Planning Policy (LUPP). Department faculty promote the integration of physical, human, cultural, and resource geography. The Geography program emphasizes arid lands and landscapes, with a focus on intermountain environments, and specialties in geographic information science, climate, dynamics of past environments, and cultural historical geography.

FACULTY

- * Thomas Albright, PhD, University of Wisconsin, Madison, 2007
Assistant Professor
Office: Mackay Science 104; phone: 784-6673; e-mail: talbright@unr.edu
Specialties: conservation biogeography; eco-climatology; landscape ecology; remote sensing

- * Scott Bassett, DDes, Harvard, 2001
Assistant Professor
Office: Mackay Science 224; phone: 784-1434; e-mail: sbassett@unr.edu
Specialties: land use planning; alternative future assessment; GIS; spatial modeling; ecology; conservation biology

- * Kate A. Berry, PhD, University of Colorado, 1993
Associate Professor
Office: Mackay Science 302; phone: 784-6344; e-mail: kberry@unr.edu
Specialties: water resources; indigenous peoples; ethnicity and race; geography of law and public policy

- * Franco Biondi, PhD, University of Arizona, 1994
Professor
Office: Mackay Science 225; phone: 784-6921; e-mail: fbiondi@unr.edu
DendroLab: Mackay Science 116 and 117; phone: 784-6348
Specialties: climate and forest dynamics; dendrochronology; quantitative methods

- * Douglas, P. Boyle, PhD, University of Arizona, 2001
Associate Professor
Office: Mackay Science 104B; phone: 673-7441; e-mail: Doug.Boyle@dri.edu
Specialties: watershed hydrology; integrated modeling; stream-flow forecasting; sensitivity analysis

- Chris Garner, MS, Hydrology, University of Nevada, 2007
Administrative Faculty
Office: Mackay Science 104C; phone: 784-6705; e-mail: cgarner@unr.edu
Specialties: integrated modeling; water markets; surface water hydrology; stream temperature modeling

- * Gary J. Hausladen, PhD, Syracuse University, 1983
 Professor and Graduate Program Director
 Office: Mackay Science 326; e-mail: hausl@unr.edu
 Specialties: political, economic; Russia; literature & film; cultural landscapes

- * Jill S. Heaton, PhD, Oregon State University, 2001
 Associate Professor
 Office: Mackay Science 325A; phone: 784-8056; e-mail: jheaton@unr.edu
 Geospatial Laboratory (G-Lab): Mackay Science 327; phone: 784-6287
 Specialties: geographic information systems and science; desert ecology; spatial modeling; remote sensing; herpetology

- * Scott A. Mensing, PhD, University of California, Berkeley, 1993
 Professor and Undergraduate Advisor
 Office: Mackay Science 325B; phone: 784-6346; e-mail: smensing@unr.edu
 Palynology Laboratory: Mackay Science 314
 Specialties: paleoecology; biogeography; Quaternary studies

- Rohit Patil, MS, University of Nevada, Reno, 2003
 Administrative Faculty
 Office: Mackay Science 327A; phone: 682-7839; email: rohit@unr.edu
 Specialties: GIS programming; remote sensing

- * Paul F. Starrs, PhD, University of California, Berkeley, 1989
 Foundation Professor and Department Chair
 Office: Mackay Science 115; phone: 784-6930; e-mail: starrs@unr.edu
 Specialties: natural resources; cultural geography; cartography and graphic representation; Nevada and the American West, Spain, Portugal, & the Mediterranean

- Scotty Strachan, MS, University of Nevada, 2011
 Administrative Faculty
 Office: Mackay Science 116; phone: 327-2346; e-mail: Scotty@dayhiker.net
 Specialties: dendrochronology, environmental monitoring, Great Basin, water resources

- Jeffrey Thompson, MS, University of Nevada, 200x
 Administrative faculty; assistant state climatologist
 Office: Mackay Science 201; phone: 784-1723; e-mail jefferyt@unr.edu
 Specialties: synoptic and graphic climatology; meteorology; microclimatology

ADJUNCT FACULTY

- * Nigel Allan, PhD, Syracuse University, 1978
 Specialties: cultural geography; mountain societies and habitat; Afghanistan

- * Mella Harmon, M.S., University of Nevada, 1998
 Specialties: land use planning; historic preservation

- * Jason (Jake) Haugland, PhD, University of Colorado, 2003
Specialties: soil and cold climate geomorphology; alpine environments
- * Michael Kaplan, PhD, SUNY Albany, 1972
Specialty: synoptic climatology
- * Alexandra Lutz, PhD, University of Nevada, Reno, 2007
Specialties: international water development; groundwater hydrology
- * Kenneth McGwire, PhD, University of California, Santa Barbara, 1992
Specialties: hyperspectral remote sensing; GIS; invasive species; geographical epidemiology
- * David A. Mouat, PhD, Oregon State University, 1974
Specialties: geocology; remote sensing; desertification; alternative futures assessment
- * Ken Nussear, PhD, University of Nevada, Reno, 2004
Specialties: distributional limitations of plants and animals; desert ecology; physiological ecology; conservation biology
- * Victoria Randlett, PhD, University of California, Berkeley, 1999
Specialties: urban geography; American West; historical geography

* Denotes status as Graduate Faculty

STAFF

Shari L. Baughman

Department Administrative Assistant

Office: Mackay Science 201; phone: 784-6687; e-mail: geog@unr.edu

Betty Belay

Department Office Assistant

Office: Mackay Science 201; phone: 784-6995; e-mail: geog@unr.edu

OTHER CAMPUS CONTACTS

Financial Aid; phone: 784-4666; <http://www.finaid.unr.edu/>

Graduate School; phone: 784-6869; <http://www.vpr.unr.edu/grad2/>

Graduate Student Association; phone: 784-4629; <http://www.vpr.unr.edu/gsa/>

Mackay Student Services; phone: 327-2056; <http://www.unr.edu/mines/StudentServices>

CURRENT GRADUATE STUDENTS – GEOGRAPHY, LUPP, & HYDROLOGY

PhD Geography (16)

Jeff Crawford
Gail Ferrel
Cassie Hansen
Anna Higgins
Christine Johnson
Mackenzie Kilpatrick
Quinn Korbolic
Catherine Magee
Anna Patterson
Nyssa Perryman
Amanda Roberts
Kerry Rohrmeier
Giancarlo Sadoti
David Simeral
Scotty Strachan
Engrid Whisenant

LUPP (10)

Haley Anderton
Jonothan Donald
Michael Johnson
Ian Kono
Patrick Martinez
Isaac Morrison
Andrea Napoli
Scott Phillips
Jeremy Smith
Dagny Stapleton

MS Geography (13)

Nicholas Connolly
Patrick Cummings
Barbara Gerland
Michael Hay
Kathy Heslop
Michelle Hochrein
Alexandra Horangic
Jacob Kastner
Shawn MacCabe
Charles Morton
Derek Norpchen
Helene Seelye
Scott Speer

PhD Hydrology (2)

Cornelia Barth
Rajan Devkota

DEPARTMENT FACILITIES

Located in the historic Mackay Science building, on the main quad, the Department of Geography houses the office of the Nevada State Climatologist (MS 315), a Geospatial Lab (MS 327), and two physical geography laboratories, one for Palynology (MS 314), the other for Dendrochronology (MS 116 and 117). The Department has state-of-the-art facilities for computer mapping, cartography, and Geographic Information Systems. The Department also maintains a weather station, a map collection, and a laboratory for undergraduate sections of physical and cultural geography (MS 133).

Each faculty member and graduate student has a mailbox in the Department Office, MS 201. Mailboxes should be checked regularly for correspondence. Outgoing campus mail can be placed in the apposite basket located in the Department Office. Graduate teaching assistants for the 100-level classes are assigned office space in MS 134, next to the Undergraduate Geography laboratory (MS 133). Graduate teaching assistants for computer lab courses have desks available in MS 220, adjacent to the Geography computing facility. Graduate research assistants should have a desk in the space allocated to their faculty sponsor. Cubicles in the graduate student room (MS 322) ought to be used on a rotating basis, so that graduate students without an assistantship can have access to a desk and a computer when they need them.

The Geography Computing Facility is housed in Mackay Science 221 and 222. Use of this facility and its computers is contingent upon meeting a number of conditions, and not engaging in behavior that could prove unpleasant or distracting to other students or affect the smooth running of the facility. Keep in mind that some students will be using the lab regularly (daily) and others will be casual users, which means that they will have one or two week projects (for certain classes) or will need to use the computers occasionally for checking electronic mail, downloading files on the Net or doing research on the internet.

As a graduate student in the Department of Geography you can sign up as a formal "user." You will then be issued a folder on the Department server, where disk space should be used judiciously. Back up your files; although every effort will be made to maintain and backup the server, problems may happen.

Facility regular hours (both rooms) are 8 am to 5 pm, Monday through Friday. The Facility may also be opened for some additional evening hours. No eating, drinking or smoking in the computer room. Clean up after working on computers or tables. Consideration of fellow students is not only polite, it is required.

Remove personal files when finished with each session. Do not store personal documents on the hard disks or leave the icon of a diskette on the computer's virtual desktop. If work is copied onto the hard disk for use during a computing session, remove it when done. Do not under any circumstances install desk accessories, fonts, programs or utilities on the hard disks. Please do not rearrange the desktop and folders on the hard disk.

No copying of facility software or use of pirated software is tolerated. Do not run multiple copies on the Laser printers (i.e., do not use printers as a photocopying machine). Facility resources (computers, printers, software and supplies) are reserved for projects related to the academic programs of the Department of Geography.

AFFILIATED CAMPUS FACILITIES AND PROGRAMS

The University library (Knowledge Center) is the largest in the state, with more than 861,000 volumes, 6,000 current periodical subscriptions, 2.5 million pieces of microform and more than 50 CD-ROM reference data bases. In addition, it receives almost all federal documents, publications from state agencies, and from many international organizations. Branch libraries include engineering, mines, physical sciences, life and health sciences, medicine, and the atmospheric sciences collection of the Desert Research Institute. Other library departments include computerized information services in more than 300 data bases, interlibrary loans, an audio/visual learning laboratory and a film and videotape library with more than 4,500 titles. In addition the 70,000-volume law library of the National Judicial College is also located on campus.

A number of programs and institutions are affiliated with the Department's graduate program. The Desert Research Institute, an internationally recognized center for atmospheric science, biology, energy, quaternary science, and water resources research has close ties with the Department of Geography. Exceptional facilities for the analysis of remotely sensed data are available to geography students through the Mackay School. A wide variety of institutions are located within campus that provide valuable resources to graduate students, including: the Bureau of Business and Economic Research, the National Judicial College, the Nevada Agricultural Experimental Station, the Nevada Bureau of Mines and Geology, the Nevada Seismological Laboratory, the Nevada Historical Society, the Nevada Humanities Committee, University of Nevada Press, and offices of the U.S. Geological Survey and the Reno office of the U.S. Forest Service Rocky Mountain Research Station.

The campus sponsors a variety of different centers of interest to geographers: Academy for the Environment, Alan Bible Center for Applied Research, Atmospheric Sciences Center, the Center for Dispute Resolution, Center for Economic Development, Center for Neotectonic Research, International Students and Scholars Program, Oral History program, Center for Basque Studies, the Water Resources Center, and the Women's Resource Center.

In addition to resources within Geography, faculty in a number of other graduate programs at the University of Nevada have expertise that may be of special interest to graduate students. These include: anthropology and historic preservation; atmospheric science; Basque studies; ecology, evolution and conservation biology; economics and resource economics; environmental science and health; environmental policy; hydrology and hydrogeology; judicial studies; literature and the environment, public administration; and resource management.

SEMESTER CREDIT HOUR REQUIREMENT

All graduate students must register for credits during each fall and spring semester they are in the graduate program. The Graduate School requires students without assistantship (RAs or TAs) to register for a minimum of three (3) graduate credits each Fall and Spring semester until graduation. Students employed as graduate assistants must be enrolled in at least six (6) graduate credits, and they must maintain this registration throughout the assistantship period. Grants-in-Aid for assistantships are now capped at nine (9) credits per semester. Students who register for nine (9) graduate credits or more in a semester are considered full-time. For graduate assistants, six (6) graduate credits or more constitute full-time.

If you are unable to take courses, you must apply for a Leave of Absence using the appropriate form, available on the Graduate School web site. Many students who are completing

their dissertations/theses, but don't wish to take a course with regular meeting hours, will enroll in Thesis or Dissertation credits; a minimum of three (3) are required per semester, and six (6), if you continue on an assistantship.

ADVISOR AND GRADUATE COMMITTEE

Upon acceptance into the graduate program each student is assigned to a Faculty Advisor, who is always the Committee Chair or co-Chair and a full-time Geography faculty member. Your Advisor should be the primary Department contact for information, guidance and mentoring throughout a student's graduate studies. It is the student's responsibility to contact his/her Advisor about appropriate coursework, research questions, and selection of a graduate committee.

Up until you take your comprehensive examination, it is possible to change advisors if there is another Department faculty member who is willing to serve as your Advisor. The previous Advisor and the Graduate Director must be notified of the change. Co-advisors are possible, though this course of action should be carefully discussed with your department advisor.

Each student, in conjunction with his/her Advisor, will select a Graduate Committee to provide guidance in selecting an appropriate curriculum, and to see the student through the comprehensive examination (PhD) and dissertation/thesis research. The Graduate Committee should be appointed within the first year for Masters students, within the third semester for PhD students. The Advisor and Graduate Committee are official once the "Program of Study" has been filed. The Graduate Committee will review the written and oral comprehensive examination, for PhD students, the Thesis prospectus for Masters thesis students, and the proposal for Masters non-thesis students. The graduate committee must also review, agree upon, and sign Graduate School forms for: the "Program of Study," the "Application for Admission to Candidacy," and the "Notice of Completion." Subsequent sections and the appendices provide more details about specific requirements.

Graduate advisors and committee chairs (both PhD and MS) must be full-time faculty members of the Department of Geography. A current list of members of the graduate faculty can be found on the Graduate School's website. Adjunct Faculty can be on graduate committees, but not as advisors/chairs. They may serve as co-chairs, however. At least one committee member must be a Graduate School-approved faculty member from a department other than Geography, who represents the University-at-large and the Graduate School. To formally establish a committee, complete a "Program of Study" form. If any changes are made to your graduate committee, fill out a "Change of Advisory Committee" form.

PHD PROGRAM IN GEOGRAPHY

GRADUATE COMMITTEE

The PhD graduate committee consists of at least five members of the graduate faculty, including your Advisor. In addition to the permanent advisor as chair, the committee is composed of two or more members from Geography; one or more members from departments in related fields; and, one member outside Geography, who is the Graduate School Representative.

PHD RESIDENCY REQUIREMENT

All PhD students must fulfill the Graduate School residency requirement, which requires two consecutive semesters of at least nine (9) graduate credits each. Students on 20 hr/week assistantships require six (6) credits each for two consecutive semesters.

CURRICULUM FOR THE PHD IN GEOGRAPHY

Total required credits, including max of 24 from Masters degree		72
Required Courses --		6
GEOG 700 – History and Nature of Geography (Fall)	3	
GEOG 702 – new course for PhD students only (Spring)	3	
Two of the following three:		6
700-level seminar in Physical Geography	3	
700-level seminar in Human Geography	3	
700-level seminar in Human/Environment interactions	3	
Methods courses (2)		6
Electives		3
GEOG 690 – Colloquium series		2
GEOG 795 – Comprehensive Examination (S/U)		1
GEOG 799 – Dissertation		24

Note: Except for Dissertation, Comp Exam, or the Colloquium series, any or all of these requirements may be fulfilled by courses taken during the student's Masters program. The determination of which requirements have been satisfied will be determined by the primary Advisor and the Director of the Graduate Program during the student's first year.

COMPREHENSIVE EXAMINATION

Each candidate for the PhD in Geography is required to successfully complete a written and oral comprehensive examination. Comprehensive examinations are designed to ensure that the student has attained a reasonable proficiency level in the chosen field of study. The student must register for the comprehensive examination as GEOG 795 (1 credit) during the semester the exam is to be taken.

The written examination shall be supervised by the student's Advisor and Graduate Committee. The student, Advisor, and Graduate Committee will identify two or three relevant subfields in Geography to be covered in the examination.

The Department has identified two possible scenarios for the written comps:

Option One --

- A total of five-to-six questions answered over a two-day period
- Three questions per day, selected from a set of 4-5 questions per subfield
- Two hours per question, closed book, done on a computer in the Department

Option Two –

- Again, a total of five-to-six questions answered – two-to-three subfields
- The student will be given the examination and asked to return the type-written answers within a given time period, normally 72 hours – a detailed bibliography is expected for each answer

For both scenarios --

- Questions to be solicited from the Graduate Committee with the Advisor editing as appropriate
- All questions to be graded Pass/Fail by all committee members
- After seeing the grading, the Advisor, in communication with the Graduate Committee, determines whether the writings are “passed” or “failed.” If a “fail” is given, then no orals follow and another meeting is held to determine the deficiencies that need to be addressed before scheduling a second and final written exam.
- If a “pass” is given, the oral portion of the comprehensive examination should take place within two weeks of the completion of the written examination and will be supervised by the student’s Advisor and Graduate Committee. The oral portion of the comprehensive examination will be based upon the written examination.

After the examination, a passing grade (S) will be given for successful completion of both the written and oral parts of the comprehensive examination. An incomplete (X) or failing (U) grade may be rectified by retaking both portions of the examination during the subsequent semester. These grades will be recorded by the “Doctoral Degree Admission to Candidacy/Comprehensive Examination Report” form, which raises the student to PhD candidacy status, the equivalent of ABD. There are two items of note for candidacy – first is the successful completion of the written and oral comprehensive examinations, with dates for both; second is verification that the student has completed the residency requirement (as discussed above).

DISSERTATION

Each PhD student will need to enroll for a minimum of 24 hours of dissertation credits. These credit hours are not given a letter grade. Dissertation credits may **NOT** be taken during the summer semester, except under special circumstances.

The dissertation topic and the methodology are chosen by the student in consultation with the Advisor and Graduate Committee. Students should work closely with their Advisors and Graduate Committee members on their dissertation research and the documentation of the dissertation. For those involved in research dealing with human subjects, be informed that effective February 1, 2003, the University requires the completion of formal on-line training prior to obtaining the necessary authorization (details are available on the UNR Office of Human Research Protection Web site, <http://www.unr.edu/ohrp/>). Similarly, for those students involved in research dealing with animals, an Animal Use and Care Permit is required.

There are options to satisfy the Dissertation requirement for the PhD in Geography. One option is a traditional monograph, including a “methodology” and a “literature review.” Another common option is to produce publication-ready articles or book chapters (typically three [3]), interconnected by a single overriding theme. The determination of which option is most appropriate for the candidate is left to the student’s Graduate Committee.

Students will present and defend their dissertation to their Advisor and Graduate Committee. Typically, the first portion of a dissertation defense is a formal presentation of about an hour, including questions and answers, and this is open to the public. After the presentation and the question/answer period, the defense is closed to the public, and the Advisor and the Graduate Committee will have an opportunity to ask what are typically more detailed questions about the student’s project.

When a dissertation is successfully defended, the “Notice of Completion” must be filled out and turned into the Department’s Graduate Director. The “Notice of Completion” form must be submitted to the Graduate School by mid-December for Fall semester graduation, and by mid-May for Spring semester graduation (check the Graduate School website for exact dates).

The approved dissertation must be sent to the Graduate School. Deadlines for dissertation submission are the same as those for the “Notice of Completion.” It is recommended that each student makes an appointment at the Graduate School to check the necessary format and style before handing in a final dissertation. Further information about dissertation preparation can be found on the Graduate School website.

MASTER OF SCIENCE IN GEOGRAPHY

GRADUATE COMMITTEE

The MS graduate committee consists of at least three members of the graduate faculty, including your Advisor. At least two members represent the area of specialization; one member serves as the Graduate School Representative.

COMPREHENSIVE EXAMINATION – MASTER OF SCIENCE

The Comprehensive Examination for the thesis option in Geography and LUPP has been eliminated. Instead, students will make a formal prospectus presentation to their committee.

CURRICULUM FOR THE MS IN GEOGRAPHY

Candidates for the MS in Geography must satisfy the general requirements of the Graduate School. Courses should be selected to complement the student’s fields of interest and enhance his/her conceptual and research skills. The Advisor should be consulted in the selection of courses. The “Program of Study” form is to be completed by the student with the assistance of his/her Advisor and Graduate Committee by the end of the first year of residency at UNR. This form requires the signature approval of each committee member, the Department’s Graduate Director and the Graduate Dean. Two degree plans are available: Plan A (31 credits) includes a thesis on original research; Plan B (36 credits) replaces the thesis with a non-thesis option. Since one credit (GEOG 795) is S/U, no more than 2 other credits with an S/U grade can be used toward the degree.

Plan A (Thesis)

Required Courses	Credits
GEOG 700 - History and Nature of Geography *	3
Methods courses (2) **	6
GEOG 797 - Thesis	6
Electives	16
Total required credits	31

Of these 31 credits, at least 18 need to be at the 700-level (nine of your credits will be GEOG 700 and GEOG 797, as spelled out above) and at least 22 of your graduate credits need to be at UNR (this means that no more than 9 credits can be transferred in).

Plan B (Non-thesis)

Required Courses	Credits
GEOG 700 - History and Nature of Geography *	3
Methods courses (2) **	6
GEOG 796 - Professional Paper	2
Electives	25
Total required credits	36

Of these 36 credits, at least 18 need to be at the 700-level (including the required courses GEOG 700 and GEOG 796, for a total of five credits), and at least 27 need to be at UNR (this means that no more than 9 credits can be transferred in).

Examples of acceptable methods courses are as follows:

GEOG 607	Geographic Information Systems
GEOG 609	Advanced Geographic Information Systems
GEOG 612	Computer Mapping
GEOG 616	Spatial Analysis in Geography
GEOG 701g	Advanced Geography - Field Methods
ANTH 646	Archaeological Methods
APST 663	Discrete Systems Simulation
APST 750	Quantitative Methods in Resource and Applied Economics
BADM 700	Statistics for Decision Making
CS 601	Fundamentals of Computer Science
CEP 640	Educational Measures and Statistics
CEP 700	Introduction to Research Design
CEP 740	Advanced Educational Measurements and Statistics
CTL 744	Research Applications in Curriculum, Teaching, and Learning
EECB 750	Research Design in Ecology
ECON 641	Introduction to Econometrics
GE 743	Geostatistics
GEOL 669	Advanced Stratigraphic Analysis
GEOL 705	Inverse Problems for Earth Sciences

* To be taken in the first semester of residence at the University

** To be selected among a list of Geography and non-Geography classes (see below)

GEOL 712	Isotope Geochemistry
GEOL 755	Basin Analysis
HIST 783	Historiography
MATH 661	Probability Theory
NRES 651	Remote Sensing of Natural Resources
NRES 675	Applied Landscape Ecology
NRES 682	Small Watershed Hydrology
PSY 706	Intermediate Statistics I
PSY 707	Intermediate Statistics II
STAT 652	Statistics I
STAT 653	Statistics II

Each graduate course must be completed with a grade of C or better for the credit to be acceptable toward the degree. Additionally, students in the program must maintain a 3.0 (B) or better cumulative grade point average in all graduate credits attempted at the University. Students have up to six (6) years to complete all requirements for their degree (including the period for the transfer credits). A template for obtaining the master's degree in two (2) years is provided in this booklet under the heading "Roadmap to Completion." Be advised that the six-year clock begins with the first course you apply toward the degree, i.e., any courses you transfer in. If credits are from another institution, the "Graduate Credit transfer Evaluation Request" must be filed.

THESIS

Each student who opts to complete a thesis will need to enroll for a minimum of six hours of thesis credits. These credit hours are not given a letter grade and should generally be taken over the course of two or more semesters. Thesis credits may **NOT** be taken during the summer semester, except under special circumstances.

The thesis topic and the methodology are chosen by the student in consultation with the Advisor and Graduate Committee. Students should work closely with their Advisors and Graduate Committee members on their thesis research and the documentation of the thesis. For those involved in research dealing with human subjects, the University requires the completion of formal on-line training prior to obtaining the necessary authorization (details are available on the UNR Office of Human Research Protection Web site, <http://www.unr.edu/ohrp/>). Similarly, for those students involved in research dealing with animals, an Animal Use and Care Permit is required.

Students will present and defend their thesis to their Advisor and Graduate Committee. Typically, the first portion of a thesis defense is a formal presentation of about an hour, including questions and answers, and this is open to the public. After the presentation and the question/answer period, the defense is closed to the public, and the Advisor and the Graduate Committee members will have an opportunity to ask what are typically more detailed questions about the student's project.

When a thesis is successfully defended, the "Notice of Completion" must be filled out and turned into the Department's Graduate Director. The "Notice of Completion" form must be submitted to the Graduate School by mid-December for Fall semester graduation, and by mid-May for Spring semester graduation (check the Graduate School website for exact dates).

The approved thesis must be sent to the Graduate School. Deadlines for thesis submission are the same as those for the "Notice of Completion." It is recommended that each student makes

an appointment at the Graduate School to check the necessary format and style before handing in a final thesis. Further information about thesis preparation can be found on the Graduate School website.

NON-THESIS OPTION

The non-thesis option requires graduate students to complete a larger number of coursework credits, and allows fewer credits for the professional paper. Consequently, the expectations are distinct.

Students are required to prepare a professional paper, after first identifying a target journal and audience; the professional paper will be presented to a public audience and the treatment defended before the student's Graduate Committee. The exact approach taken in the non-thesis option has some latitude: It can be a paper manuscript suitable for publication in a specified journal. It can be a review essay, analyzing an existing body of literature or an approach to a problem in sufficient depth to demonstrate mastery of that material. The professional paper can be an explication of a map that the student prepares, or a set of maps or GIS coverages, or analysis of remotely-sensed material. Or, for teachers, it would not be inappropriate to offer a course module, amounting to five or six classroom lesson plans all turning about a common theme. What in any case must be demonstrated in the written and oral work, and in the defense, itself, is command of the material demonstrating adequate mastery.

MS IN LAND USE PLANNING POLICY (LUPP)

GRADUATE COMMITTEE

The MS graduate committee consists of at least three members of the graduate faculty, including your Advisor. At least two members represent the area of specialization; one member serves as the Graduate School Representative.

COMPREHENSIVE EXAMINATION – MASTER OF SCIENCE

The Comprehensive Examination for the thesis option in Geography and LUPP has been eliminated. Instead, students will make a formal prospectus presentation to their committee.

CURRICULUM FOR THE MS IN LUPP

Candidates for the MS in LUPP must satisfy the general requirements of the Graduate School. In addition, degree candidates must complete an introductory course in statistics prior to matriculation. (This deficiency can be corrected during the first semester of residence). Courses should be selected to complement the student's fields of interest and enhance his/her conceptual and research skills. The Advisor should be consulted in the selection of courses. The "Program of Study" form is to be completed by the student with the assistance of his/her advisor before the third semester of residency at UNR. This form also requires the signature approval of each committee member, the Department's Graduate Director and the Graduate Dean. Two degree plans are available: Plan A (Thesis -- 31 credits) includes a thesis on original research; Plan B (Non-thesis -- 42 credits) replaces the thesis with an exit examination and additional coursework. No more than three (3) credits with an S/U grade can be used towards the degree. No more than nine (9) credits can be transferred in.

Core Courses (both programs) – 14 credits

	<u>Credits</u>
GEOG 700 – History and Nature of Geography*	3
GEOG 707 – Introduction to Planning Methods	1
GEOG 710 – History and Nature of Planning**	3
GEOG 711 – Planning Theory	3
GEOG 759 – Introduction to Planning Studio	1
GEOG 760 – Planning Studio	3

* To be taken in the first semester of residence at the University

** To be taken in the second semester of residence at the University

Plan A (Thesis) – 31 credits

Core Courses – 14 credits	14	
GEOG 797 –Thesis	6	
Elective Courses	11	
		31

Of these 31 credits, a least 18 need to be at the 700-level (nine of your credits will be GEOG 700 and GEOG 797, as spelled out above)

Plan B (Non-Thesis) – 42 credits

Core Courses		14
Other required Courses		7
• GEOG 655 – Planning Ethics	3	
• GEOG 756 – Planning Law	3	
• GEOG 798 – Exit Examination	1	
One of the following:		3
GEOG 652 – Urban Geography		
GEOG 654 – Urban Landscape Analysis		
Approved course in Methods		3
Approved course in Economics or Resource Economics		3
Emphasis Courses		6
Environmental Planning:		
GEOG 666 – Environmental Planning	3	
Approved course in environmental planning	3	
Growth Management:		
GEOG 658 – Land Use Planning and Policy	3	
One of the following:		
GEOG 657 – Transportation Planning and Policy	3	
GEOG 659 – Housing Planning and Policy	3	
Historic Preservation:		
HP 600 – Principles of Historic Preservation	3	
One of the following:		

HP 601 – Laws and Policies 3
HP 605 – Historic Preservation Survey & Planning

Elective Credits 6
 Various courses approved by your Advisor

Total required credits 42

Examples of approved economic courses:

ECON 620 Economics of Health Care and Health Policy
ECON 651 Public Finance
ECON 654 Economics of Government
ECON 671 Urban Economics
ECON 751 Economics of the Public Sector

Examples of approved methods courses:

ANTH 638 Ethnographic Field Methods
BADM 700 Statistics for Decision Making
ECON 641 Introduction to Econometrics
GEOG 605 GIS I: Geographic Information Systems and Science
GEOG 607 GIS II: Advanced Geographic Information Systems and Science
GEOG 609 GIS Design Studio
GEOG 616 Spatial Analysis
HIST 786 Oral History Methodology
HP 670 Research Practicum
STAT 757 Applied Regression Analysis

Examples of approved environmental planning courses:

GEOG 635 Conservation of Natural Resources
GEOG 638 Western Water and Resource Management
NRES 612 Environmental Law
NRES 621 Conservation Biology
NRES 675 Applied Landscape Ecology
NRES 682 Small Watershed Hydrology
NRES 694 Range and Forest Administration

Each graduate course must be completed with a grade of C or better for the credit to be acceptable toward the degree. Additionally, students in the program must maintain a 3.0 (B) or better cumulative grade point average in all graduate credits attempted at the University. Students have up to six years to complete all requirements for their degree (including the period for the transfer credits). A template for obtaining the master's degree in two years is provided in this booklet under the heading "Roadmap to Completion."

THESIS

Each student who opts to complete a thesis will need to enroll for a minimum of six hours of thesis credits. These credit hours are not given a letter grade and should generally be taken over the course of two or more semesters. Thesis credits may **NOT** be taken during the summer semester, except under special circumstances.

The thesis topic and the methodology are chosen by the student in consultation with the Advisor and Graduate Committee. Students should work closely with their Advisors and Graduate Committee members on their thesis research and the documentation of the thesis. For those involved in research dealing with human subjects, the University requires the completion of formal on-line training prior to obtaining the necessary authorization (details are available on the UNR Office of Human Research Protection Web site, <http://www.unr.edu/ohrp/>). Similarly, for those students involved in research dealing with animals, an Animal Use and Care Permit is required.

Students will present and defend their thesis to their Advisor and Graduate Committee. Typically, the first portion of a thesis defense is a formal presentation of about an hour, including questions and answers, and this is open to the public. After the presentation and the question/answer period, the defense is closed to the public, and the Advisor and the Graduate Committee members will have an opportunity to ask what are typically more detailed questions about the student's project.

When a thesis is successfully defended, the "Notice of Completion" must be filled out and turned into the Department's Graduate Director. The "Notice of Completion" form must be submitted to the Graduate School by mid-December for Fall semester graduation, and by mid-May for Spring semester graduation (check the Graduate School website for exact dates).

The approved thesis must be sent to the Graduate School. Deadlines for thesis submission are the same as those for the "Notice of Completion." It is recommended that each student makes an appointment at the Graduate School to check the necessary format and style before handing in a final thesis. Further information about thesis preparation can be found on the Graduate School website.

NON-THESIS OPTION

The non-thesis option requires graduate students to complete a larger number of coursework credits, and allows fewer credits for the professional paper. Consequently, the expectations are distinct.

Students are required to prepare a professional paper, after first identifying a target journal and audience, and that professional paper will be presented to a public audience and the treatment defended before the student's Graduate Committee. The exact approach taken in the non-thesis option has some latitude: It can be a paper manuscript suitable for publication in a specified journal. It can be a review essay, analyzing an existing body of literature or an approach to a problem in sufficient depth to demonstrate mastery of that material. The professional paper can be an explication of a map that the student prepares, or a set of maps or GIS

coverages, or analysis of remotely-sensed material. Or, for teachers, it would not be inappropriate to offer a course module, amounting to five or six classroom lesson plans all turning about a common theme. What in any case must be demonstrated in the written and oral work, and in the defense, itself, is command of the material demonstrating adequate mastery.

EXIT EXAMINATION

Each student for the Plan B MS program in LUPP is required to successfully complete an oral exit examination during their last term of residency. Exit examinations are designed to ensure that the student has attained a reasonable proficiency level in the chosen field of study. The student must register for the exit examination as GEOG 797 (1 credit) during the semester the exam is to be taken.

The oral examination shall be supervised by the student's Advisor and Graduate Committee. The examination will consist of a presentation of student work while enrolled in the LUPP program. Questions will be asked by the student's Advisor and other Graduate Committee members. When completed, examination performance will be evaluated by the student's Advisor and other Graduate Committee members.

After the examination, a passing grade (S) will be given for successful completion of both the written and oral parts of the comprehensive examination. An incomplete (X) or failing (U) grade may be rectified by retaking the examination during the subsequent semester. These grades will be recorded by the Advisor on the Notice of Completion Form. This form should not be turned into the Graduate School until all coursework has been completed.

THE NORTHERN NEVADA PLANNING STUDENT ORGANIZATION (NNPSO)

NNPSO is a recognized graduate club on the UNR campus and is also a student chapter of the American Planning Association. The organization's intent is to create a bridge between the students' academic goals and the planning profession. With this in mind, the student group seeks to establish and maintain interactions with local planners working in public and private positions. These relationships have proven to be beneficial to the University's students in many ways, including: specialized knowledge, professional guidance, and facilitation of proficiency in planning procedures and practices. The students also recognize that land use planning is a diverse field in which exposure to various other disciplines is necessary for the advancement of understanding the complex nature of contemporary issues. Therefore, students and scholars of other programs at UNR are welcome as members and mentors of NNPSO. For more information about NNPSO, please contact the current president, Isaac Morrison at izik_lee@yahoo.com.

PRESENTATION OF RESEARCH

All graduate students are strongly urged to make a formal presentation of their research at a national or regional professional meeting. Funding to support such presentations is often available from the Department, as detailed in the following paragraphs.

The Department is willing to pay for the registration cost of at least one professional conference per year where a student is giving a paper, presenting a poster, speaking on a panel, or making some other formal presentation. The amount available will be at least equal to the student registration fee of the AAG annual conference.

A student may apply for funding from the Graduate Student Association. Students presenting at national conferences may also ask the Department for financial support to pay for travel and accommodations, but those requests will require Chair's approval and will be evaluated according to need and available funds.

A student may request support for additional conferences where they are presenting. These requests will require Chair's approval and will be evaluated according to need and available funds.

To support attendance at regional Geography conferences, when funding is available, the Department will pay the registration fee for any student wishing to attend the annual meeting of the Association of Pacific Coast Geographers. The Department will also provide transportation (vans) when the conference is within reasonable driving distance and funds are available.

ROADMAP TO COMPLETION

To help students plan for completing their degree, we present a possible timeline for the PhD and both MS Plan A (thesis) and Plan B (non-thesis) options. This simply illustrates how all program requirements could be satisfied in a timely manner. Keep in mind that full-time graduate students usually take 6 - 9 credits/semester, and that Plan B students need to take at least one more 700-level course than Plan A students. Also, any student interested in pursuing a doctoral degree after completing the Master's is urged to choose the Plan A option.

NOTE: Faculty are off-contract during the summer, and only occasionally (and by making prior special arrangements) can a student count on completing a defense during the summer months.

PhD Geography Timeline

Year One –

- Discuss and decide upon research topic with advisor
- Discuss and decide upon two or three areas of expertise for the comprehensive examination
- Establish a graduate committee
- First draft of dissertation prospectus
- Map out research agenda & requirements (e.g., prep for fieldwork, necessary forms & protocols, etc.)

Year Two –

Third semester (Fall):

- Complete comprehensive examination
- Graduate committee approval of dissertation prospectus

Fourth semester (Spring):

- Complete coursework
- Begin research & writing of dissertation

Year Three –

- Complete research
- Complete dissertation
- Defend dissertation

MS Geography Plan A (Thesis) Timeline

First (Fall) semester:

- Begin thesis prospectus (GEOG 700)
- Discuss thesis topic(s) and potential committee members with Advisor

Second (Spring) semester:

- Complete “Program of Study” form – obtain approval of thesis committee
- Prepare for fieldwork - if necessary, clear Human Subjects committee (requires completion of approved prospectus) or clear Animal Care committee
- Complete thesis prospectus
- Constitute committee

Note: Sometime between the second and third semester, the student should have the committee provide final approval of the thesis proposal

Third (Fall) semester:

- Conduct fieldwork
- Analyze data
- Prepare thesis drafts
- File for graduation

Fourth (Spring) semester:

- Finish, defend, and file thesis with the Graduate School

Geography Plan B (Non-thesis option) Timeline

First (Fall) semester

- Discuss professional paper topic(s) and potential committee members with advisor

Second (Spring) semester:

- Complete "program of study" form – obtain approval of thesis committee
- Complete annotated bibliography
- Constitute committee

Third (Fall) semester:

- File for graduation

Fourth (Spring) semester:

- Complete non-thesis option (not filed with the Graduate School).
- Despite using the non-thesis option, students must still defend their final work, using the same general criteria as the student who is following the thesis option

LUPP Plan A (Thesis) Timeline

First (Fall) semester:

- Begin thesis prospectus (GEOG 700)
- Discuss thesis topic(s) and potential committee members with advisor

Second (Spring) semester:

- Complete "Program of Study" form – obtain approval of thesis committee
- Prepare for fieldwork - if necessary, clear Human Subjects committee (requires completion of approved prospectus) or clear Animal Care committee
- Complete thesis prospectus
- Constitute committee

Third (Fall) semester:

- Conduct fieldwork
- Sometime between the second and third semester, the student should take his/her comprehensive exam. At the same time, the committee should provide the final approval of the thesis proposal
- Analyze data
- Prepare thesis drafts
- File for graduation

Fourth (Spring) semester:

- Finish, defend, and file thesis with the Graduate School

LUPP Plan B (Non-thesis option) Timeline

First (Fall) semester:

- Discuss program emphases and potential committee members with advisor

Second (Spring) semester:

- Complete "program of study" form – obtain approval of graduate committee
- Constitute committee

Third (Fall) semester:

- File for graduation

Fourth (Spring) semester:

- Exit Examination

GRADUATE TEACHING ASSISTANTSHIP

The Department supports several graduate teaching assistantships. During the spring semester eligible graduate students and applicants are given the opportunity to apply for a graduate teaching assistantship (the deadline for applications is 01 February). Normally, for MS students, teaching assistantships are for one year, and renewal for a second year is contingent upon the student's progress and performance. Extension of a teaching assistantship beyond two years is rarely granted. For PhD students, teaching assistantships are for one year, and renewal for a second year and third year is contingent upon the student's progress and performance.

Selection criteria for graduate teaching assistants are as follows:

1. Graduate teaching assistants must either have a complete application for matriculation on file with the Department's Graduate Program or already be accepted into the program.
2. Graduate teaching assistantships will be offered for one academic year. Renewal for more than one year will be at the discretion of the Department.
3. In making selections for Graduate teaching assistants, the faculty will take into account the following factors:
 - a. evidence of successful teaching or tutoring experience;
 - b. overall grade point average, grades within major, and grades for courses providing background for the teaching assistantship;
 - c. GRE scores;
 - d. recommendation letters on file;
 - e. evidence of success in field work, oral presentations or other relevant experience.

All new graduate teaching assistants will need to meet the University and Department requirements for Teaching Assistants, and these may change from time to time — please consult with the graduate advisor. Students who receive an assistantship, and have also received a financial aid award, would be wise to contact the financial aid office immediately.

Teaching assistants will report directly to the course instructor to whom they are assigned. Their responsibilities to assist the course instructor may include, but are not limited to, the following tasks:

- o attending class and assisting, as needed, with distributing materials, setting up and operating audiovisual equipment;
- o conducting laboratory and/or discussion groups;
- o directing student study sessions;
- o assisting in the development of lectures, assignments, quizzes, examinations and laboratories and/or discussion groups;

- o proctoring examinations;
- o grading of class assignments, quizzes and examinations;
- o giving short presentations to the class, under supervision by the course instructor.

It is recommended that all graduate teaching assistants post their office hours in the hallway near their office door. TAs must take a minimum of six (6) credits per semester – on the other hand, they are limited to a maximum of twelve (12) credits per semester.

Although the Graduate School cannot police the policy, it is strongly recommended that students on assistantships do not seek employment, part- or full-time, during their assistantship. The Department supports this policy.

GRADUATION

In order to graduate, all program requirements must be met as specified in the previous sections. For theses and dissertations, in addition to the “Notice of Completion,” the Advisor must submit the “Final Review Approval.” Graduating students must meet all the required Graduate School dates. Students wishing to graduate must also purchase an application for graduation from the Office of Admissions and Records and submit it to his/her Advisor. Applications for graduation must be submitted to the Graduate School by October for December graduation and January for May graduation (contact the Graduate School for exact dates). The application includes the date of graduation, and the approval of the thesis committee Chair and the Graduate Dean. An applicant who does not complete all degree requirements by the specified deadline must update and resubmit an application for graduation during the next appropriate filing period.

Please remember that the Graduate School NO longer accepts any HANDWRITTEN FORMS, including Applications. All forms on the Graduate School website are interactive, i.e., the student fills them out on-line, and then prints them out for signatures.

INTRAMURAL FUNDING

In terms of graduate student support, the Department periodically has graduate research assistantships, scholarships, or student hourly positions available. Please check with your Advisor or the appropriate faculty member for information on these opportunities. The Graduate School also has information on the following types of financial assistance for graduate students: grants-in-aid for tuition and course fees, Graduate School Fellowships, Nevada Student Incentive Grant Awards, College work-study program, national Direct Student loans, PLUS loans, and short-term emergency loan programs. The Graduate Student Association may also be able to provide financial support for student research as well as travel to professional meetings.

ANNUAL PROGRESS REVIEW

Each Spring semester the Faculty conducts an annual progress review of every graduate student. After the review, a letter is mailed out to each student indicating whether his/her progress is satisfactory or not. These letters are intended to inform students of their status, and to provide a stimulus, with ample response time available, to those who may need it.

**APPENDIX A
TEACHING ASSISTANTSHIP
APPLICATION**

University of Nevada, Reno - Department of Geography

Application for Teaching Assistantship

DUE by *February 1st* for the following Academic Year

Name: _____ Social Security No. _____

If you are currently a student in the Graduate Program in Geography, please provide:

Date of acceptance into Graduate Program in Geography _____

Anticipated date of Graduation _____

If you are applying for the Graduate Program in Geography, please provide us with information on how to best reach you: Phone Fax E-mail

Do you have a job arranged for the academic year? Yes No

Is that job on the UNR campus? Yes No

Briefly describe the job and the hours worked each week.

Describe your teaching or tutoring experience.

Describe any other experiences that would qualify you to be a teaching assistant for undergraduate geography courses (success in field work, oral presentations, etc.)

Briefly describe your teaching philosophy

APPENDIX B

OTHER FORMS

All other forms can be accessed electronically from the Grad School –

<http://www.unr.edu/grad/forms>