

Graduate Handbook

**Department of
Community, Agriculture,
Recreation and Resource Studies**

2006-2007

CARRS Graduate Handbook

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• Introduction and Overview •

Vision

Our vision is to lead and aid in the development and revitalization of sustainable communities, thus enhancing the capacity of current and future generations to reach their potential.

Mission

Our mission is to assist the development of sustainable communities by conducting excellent scholarly research, teaching and outreach in (1) leadership, education, and communication, (2) community, food, and agriculture, (3) natural resources, land use, and the environment, and (4) recreation and tourism.

Our Work

As scholar-practitioners, and as a multidisciplinary department within the College of Agriculture and Natural Resources, we address critical issues at the interfaces of agriculture, natural resources, recreation and tourism, and communities. Our public scholarship of research, teaching, and outreach helps people in their roles as residents, landowners, businesses, and governmental and non-profit institutions to make informed decisions while not compromising future generations. We seek to help people understand the dynamic interactions in their communities, ecosystems, and the world, as well as opportunities for sustainable revitalization. This work is rooted in our view of a just, engaged, and dynamic society. Toward that end, we are guided by an ethic of responsible and responsive scholarship that engages people in an integrative process to maximize effectiveness.

Our Values

The faculty, staff and students of the Department of Community, Agriculture, Recreation and Resource Studies value:

- development of the professional, technical, and specialized knowledge, skills and attitudes necessary to help diverse individuals and communities improve their quality of life and the environment;
- promotion of social responsibility and the development of a broad understanding and awareness of agricultural, natural resource, and recreational issues, challenges, and opportunities;
- use of nurturing approaches that support positive and healthy relationships among diverse individuals, communities, and agricultural and natural resource systems;
- respect for our environment; and
- commitment to professionalism built around liberal education, practical experience, and applied learning opportunities that encourage both local and global engagement.

Scholarly Foundation

- The faculty carries out research, teaching, and outreach focused on social, environmental, community and agricultural/food systems in order to strive for an ecologically and socially sustainable world. The faculty is committed to sustainable development that is integrative, inclusive, and systemic in nature; involves local-to-global restructuring; and promotes public health and wellness.
- The faculty studies management, planning, leadership, and policy analysis that lead to transformational change for problem solving and emerging issues in community, agriculture, recreation and resource areas.
- The faculty employs a holistic, interdisciplinary approach to understand and address such complex and interrelated issues. The faculty's multidisciplinary expertise creates a unique synergy that drives the department's mission and places the department at the fore of this broad and critical area of scholarship.
- The faculty work as scholar-practitioners. The scholar-practitioner model is built on the critical discourse connecting theory and practice in endeavors of joint discovery and learning.
- The faculty supports a continuum of scholarship by conducting applied research, engaging in outreach and Extension initiatives, and developing curricula to balance the interests and demands of its students and stakeholders.

Department Structure and Organization

The Department is one of 13 in the College of Agriculture and Natural Resources. As a unit in this College, the faculty and staff are linked directly with the Michigan Agricultural Experiment Station and Michigan State University Extension, two formal structures created specifically to address the University's land grant mission (extending research to Michigan and more global constituents via extension and outreach programs – see mission statements below). Graduate students are integrated within this land grant system across the three functions of the Department, College and University – teaching, research, and outreach – as we practice and educate students to become scholar practitioners.

The mission of **MSU Extension** is:

Michigan State University Extension (MSUE) helps people improve their lives through an educational process that applies knowledge to critical issues, needs and opportunities

The mission of **Michigan Agricultural Experiment Station** is:

The Michigan Agricultural Experiment Station generates knowledge through strategic research to enhance agriculture, natural resources and families and communities in Michigan.

The mission of the **MSU College of Agriculture and Natural Resources** is

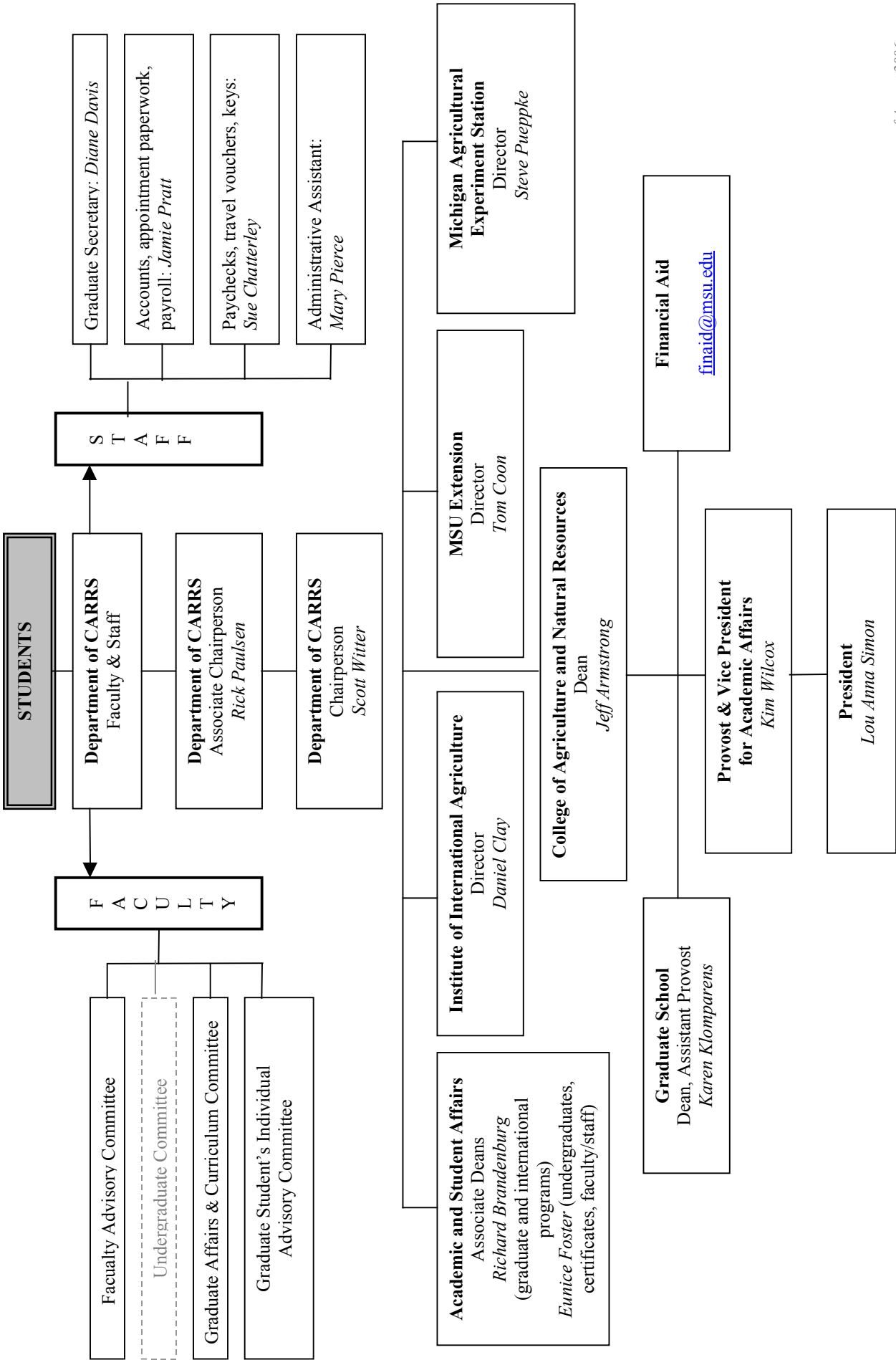
. . . to enhance the quality of life for the people of Michigan and the world by advancing knowledge for the management of communities and agricultural, natural resource and food systems to meet diverse human needs in a sustainable manner.

To accomplish this mission we must pursue:

- **Learning** that imbues current and future stakeholders with intellectual curiosity and offers relevant knowledge and skills,
- **Discovery** that advances knowledge and enhances productivity and sustainability, and
- **Engagement** with society that achieves social, economic and environmental equity.

The organizational structure of the Department is illustrated on the next page. → → → → →

Community, Agriculture, Recreation & Resource Studies Graduate Students are served by . . .



Opportunities for Student Participation in Department Life

An additional value and policy of the Department of Community, Agriculture, Recreation and Resource Studies is to provide regular opportunities for graduate students to participate in all the scholarly, professional development, research, outreach, and social functions and activities of the Department. Some of these opportunities are provided through formal structures; others are available more informally. Graduate students are expected to participate fully in the “life of the academy,” both on campus and off campus. Such involvement is considered to be as critical a component of graduate education and professional development as are courses and required research and project work.

Additionally, graduate students are expected to be active contributors to the continuing development of the Department and its work. Student perspectives, values and ideas are considered valuable input into the Department’s evolution. While always a fundamental value, this involvement is particularly critical now because the Department of Community, Agriculture, Recreation and Resource Studies is a young department, the result of blending and re-conceptualizing the former Departments of: (1) Agriculture and Extension Education, (2) Park, Recreation and Tourism Resources; and (3) Resource Development. This effort was undertaken to better meet the complex challenges, both local and global, facing the world’s citizens relative to communities, the natural environment, and the human relationship with and management of our resources (natural, agricultural, historic, cultural, economic, and others).

Formal channels for providing input include:

- Graduate Student Organization (GSO)
- Graduate Representative to the Department’s Faculty Advisory Committee (FAC)
- Graduate Representative to the Department’s Graduate Affairs and Curriculum Committee (GACC)
- Formal grievance procedures (see page 34 of this handbook).

Graduate student representatives also are included in time-bounded task forces, faculty recruitment committees, and other task-specific committees, as needed. Additionally, other opportunities for graduate student involvement exist at the University level (see the Graduate School web site or talk with the current CARRS GSO president).

Informal channels for providing input, or simply conversing about the work of the Department or asking questions, include open-door access to the following individuals:

- Chairperson of the Graduate Affairs and Curriculum Committee Dr. Gail A. Vander Stoep
- Associate Chairperson of the CARRS Department Dr. Richard Paulsen
(responsible for CARRS student programs/services)
- Graduate Secretary Diane Davis
- Chairperson of the CARRS Department Dr. Scott Witter
- Student’s individual major professor/advisor (varies)

Students are encouraged to schedule appointments ahead of time (via either email or phone) to be sure that the appropriate person is available and has adequate time to talk with you.

Diversity

The Department of Community, Agriculture, Recreation and Resource Studies is committed to creation of a diverse faculty and student body, to include recruitment of ethnically diverse domestic students/faculty/staff as well as recruitment and acceptance of international students from countries throughout the world. The Department works closely with the Office of Minority Student Affairs, the Office of International Students and Scholars, and the Center for Advanced Study of International Development (CASID). We believe strongly in the value of cross-cultural sharing and multi-disciplinary approaches to education, research and outreach. An additional aspect of diversity central to the CARRS Department is the wide variety of academic and professional backgrounds of both our students and faculty. We strongly encourage all graduate students to take advantage of the diverse student and faculty bodies (within the Department and across the MSU campus) by interacting regularly with them, both formally and informally. Everyone has knowledge, experiences and perspectives to share with each other.

• Graduate Programs •

Introduction

The graduate program in Community, Agriculture, Recreation and Resource Studies offers students a unique course of advanced study, allows flexibility within an interdisciplinary approach, and results in strong and marketable advanced degrees. Students are expected to obtain positions or create professional careers across all three sectors: public, private non-profit, and private for-profit. Some doctoral students will seek faculty positions and join the academy, both in the United States and abroad. Others will seek research positions with governmental organizations, non-governmental organizations (NGOs), or within the private sector. Others may provide leadership in a variety of domestic or international non-profit organizations dedicated to community development and/or resource management. Others may go into private business or may choose to work as consultants. Many international students return to their home country to serve in government, academia, NGOs and the private sector.

Rationale

Rapidly changing conditions and contexts (political, economic, cultural, social) impacting our natural environment, agricultural systems and communities leave citizens concerned and confused about a wide range of contentious issues that cannot be addressed from within the disciplinary boundaries recognized by the academy. Our graduate program addresses such issues in four ways.

- First, the program is founded on a set of integrated research, teaching, and service activities that embody the ethos and skills of community engagement.
- Second, the program brings together an interdisciplinary faculty clustered around issues rather than disciplines.
- Third, the program attracts students having diverse educational backgrounds and experiences who recognize the need to acquire the understanding and skills that emphasize scholarship, practice, and participatory approaches in applied research, teaching, and outreach.
- Fourth, the program recognizes the value of diversity among students, faculty and practitioners and seeks to draw from unique perspectives to enhance professional development and relationships.

Objectives

The objectives of the Department - across applications in teaching, research and outreach - are to:

- create a scholarly community characterized by lifelong learning and transformational education;
- provide students with opportunities to engage in integrative, applied research that is grounded in contemporary scholarship as well as engagement with communities; and
- support awareness of the values, operating assumptions and their influence on each student's scholarship and professional decision making.

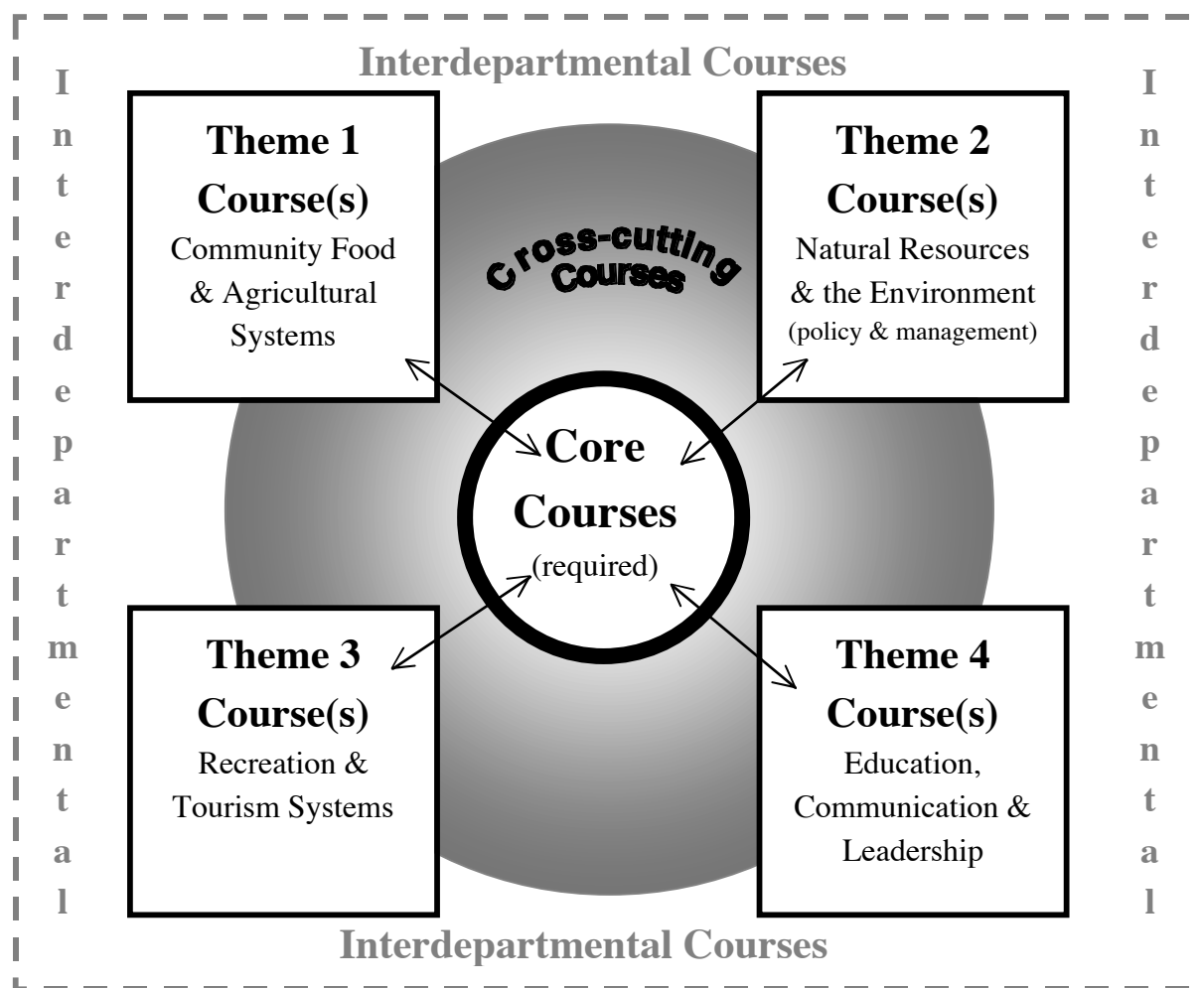
To achieve these objectives, the graduate program in Community, Agriculture, Recreation, and Resource Studies provides students the opportunity to create individualized programs that draw from several complementary areas of scholarship. These broad areas include community food and agricultural systems; natural resources and the environment; recreation and tourism systems; and education, communication and leadership. Courses are designed to help students become solidly grounded in integrative applied research approaches based on multiple paradigms, disciplines, and methods. This multiple paradigm, holistic and systemic research approach underpins a wide range of management, development, outreach, and policy applications. The multidisciplinary approach provides a scholarly foundation from which graduates may address the complex and uncertain challenges posed by changes in communities, natural resource and environmental systems, and innovations in the agricultural and food sectors.

Graduate students have the option of defining their program of study in terms of the following four thematic areas that represent the teaching, research and outreach interest of CARRS faculty (described on page 8):

- Community Food and Agricultural Systems
- Recreation and Tourism Systems
- Natural Resources and the Environment
- Education, Communication and Leadership

Conceptual Framework for Curriculum

Although four thematic focus areas of study are identified, a systems approach for linking and integrating content and decision-making across all four is strongly encouraged. To reinforce this systemic approach, the curriculum is deliberately designed to include integrative and cross-cutting courses. The conceptual framework for the curriculum model is illustrated below:



Core Courses: These courses are the department-wide required core courses (e.g., ACR 800, ACR 802, ACR 892 [MS-B], ACR 895 [MS-B]).

Theme Courses (focus areas): These courses are specialized departmental courses developed specifically around research and outreach themes.

Cross-cutting Courses: These courses are departmental courses that integrate content across two or more of the themes.

Interdepartmental Courses: These courses are those available in other departments, especially units with whom CARRS has or is developing intentional partnerships (e.g., *Family & Child Ecology*, *Hospitality*, *Communications*, *Forestry/Fisheries & Wildlife*). Courses could be joint-listed courses or those offered as part of an interdepartmental specialization (e.g., *Museum Studies Program*, *Natural Resource-based Recreation*).

Core Courses:

The currently approved Graduate Program for CARRS includes a set of required core courses (they vary by degree sought). The two core courses for all master's students (ACR 800 and 802) are offered during the fall semester. Doctoral students also are required to take ACR 800. See individual degree program requirements for additional information.

Theme Courses:

Theme courses currently are under development. Curriculum needs specific to theme areas are being identified by self-identified teams of faculty having interest and expertise in the theme areas. The number and identity of these areas may evolve over time. Some courses in the theme areas may be modifications of existing courses as currently listed by the AEE, PRR and RD course codes.

Cross-cutting Courses:

These courses are departmental courses that deliberately integrate content across two or more of the theme areas and are to be developed by self-identified teams or individual faculty. These also will reflect the CARRS foundational concepts.

Interdepartmental Courses:

These courses are identified and developed in many ways. Sometimes they are part of an interdisciplinary specialization or certification. Other times, they are simply courses that are relevant to more than one department. Sometimes they are cross-listed (overtly identifying the relevance to more than one discipline); other times they are not cross-listed.

During the period of curriculum development and transition, students are encouraged to consider relevant courses within each of the "parent department" alpha codes (AEE, PRR, RD) as well as newly developed ACR courses to be used in developing their degree plans. Students should regularly check the CARRS web site, email, and bulletin board postings for curriculum updates and new courses.

The four department themes are described on the next page. As you review descriptions of each of the four themes, you should be able to see overlaps and opportunities for integration and use of systemic approaches to addressing issues related to any of the four themes.

Primary Research & Outreach Themes (Focus Areas)

Community Food and Agricultural Systems

Scholarship in Community Food and Agricultural Systems engages citizens as both producers and consumers in developing community-based food systems. This area of inquiry supports civically-focused efforts to revitalize our food systems and redefine a more public role for agriculture through education, cooperation, and citizen engagement. Community-based food systems serve multiple goals. They seek to (1) provide viable economic opportunities for producers, (2) conserve natural resources and biodiversity, (3) minimize negative environmental impacts, (4) encourage social justice and community empowerment, and (5) enhance quality of life in urban and rural communities. We see this area as a way to integrate social and community concerns into production agriculture and to provide further opportunities to link agriculture to issues of health, natural resource management, community development, ethics, and public policy. We work domestically and internationally, viewing community-based food systems in the context of the global economy. The option in Community Food and Agriculture Systems is designed for students who wish to explore issues related to the sustainability and democratization of food and agricultural systems, and develop skills that prepare them for transformational roles within these systems. Multidisciplinary in theory and practice, the option focuses on understanding:

- forces that enable and constrain the emergence of community-based food systems;
- actions that citizens, local leaders, and government may take to support food production and distribution in a manner that is consistent with a community's multiple goals;
- research, analytical and evaluation techniques that allow for more comprehensive and collaborative inquiry and analysis; and
- leadership and other skills required to aid in development of community-based food systems.

Education, Communication, and Leadership

Research in this area focuses on theories and innovative best practices in education, communication, and leadership in a variety of systems. Research considers multiple social, economic, political, and environmental dimensions across domains associated with community, agriculture, recreation, and resources in all sectors (public, private, and nonprofit), and in all settings (domestic and international).

Natural Resources and the Environment

Research and outreach efforts in this area link social and physical sciences with policy, planning, and management of natural resources and the people who use them. Research results are used to inform decisions made by public, private, and non-profit policymakers and managers about land and water use issues, and to inform development and evaluation of formal and non-formal environmental education efforts. Scholarly efforts (1) consider multiple resource values and uses; (2) identify stakeholder perceptions and needs; (2) assess social, economic and environmental impacts of alternative policy and management decisions; and (4) facilitate assessment of the complementarities and trade-offs of alternative actions. Faculty and students conduct their work in local, state, national and international contexts. Inland and Great Lakes water resources, and the land/water interface in coastal, wetland and watershed contexts, receive focused attention.

Recreation and Tourism Systems

Scholarly efforts in the Recreation and Tourism Systems area involve developing better understanding of recreation, travel and tourism systems in local, state, national and international contexts. Research and outreach efforts focus on understanding the preferences, motivations, participation patterns and needs of tourists and recreationists; and understanding the roles and impacts of the businesses, government and non-governmental organizations that comprise and service these systems. In partnership with stakeholders, faculty and students assess the ways in which effective planning, development, management and marketing of recreation and tourism provide communities with economic diversity, enhanced quality of life, and opportunities to use existing human, natural, cultural, and historic resources in a sustainable fashion. This includes measuring expected and actual performance of public spending and enterprise investments; measuring success in meeting a variety of community and economic objectives; assessing environmental and social impacts; and assessing social and psychological benefits of recreation and tourism experiences to individuals and communities.

• Master of Science Programs •

The Master of Science (MS) in Community, Agriculture, Recreation and Resource Studies provides students with opportunities to engage in integrated and applied research and acquire professional skills. Applicants may choose one of two MS degree options: MS-Plan A (research-focused degree for which a thesis is required), or MS-Plan B (a professional degree program focused on management or other professional practice, for which a professional project is required). They should indicate their preference, as related to personal professional goals, in their application materials.

Admission

Applicants must have completed a bachelor's degree or comparable degree requirements from an educational institution recognized by Michigan State University. Relevant experience and strong academic backgrounds in the natural, physical, or social sciences are encouraged for applicants to the Master of Science in Community, Agriculture, Recreation and Resource Studies. All applicants for admission are required to submit scores from the General Test of the Graduate Record Examination (GRE). (Note that at the time of submission, the GRE scores can be no more than five [5] years old.). International applicants are required to take the TOEFL exam to assess English reading, listening, speaking and writing abilities. (Note that at the time of submission, TOEFL scores can be no more than two [2] years old.)

See Application & Admissions Process section (page 39) for details about materials required for submission. Note that a student's acceptance remains in force for one (1) year after the semester for which the student initially applies. If a student must delay start of their academic program for a year or less, they do not need to re-apply. However, if the delay is longer than one year, the student must complete the application process again, including updated support materials, as needed.

General Requirements for the Master of Science Degree

In addition to meeting the requirements of the University and of the College of Agriculture and Natural Resources (CANR), students must meet the requirements specified below.

Selection of Plan A or Plan B: First, as stated above, the student must select either Plan A (research-based, with thesis) or Plan B (professional practice/management, with professional project or experience). Plan A emphasizes integrated and applied research and is designed as the foundation for doctoral study. Plan B focuses on the acquisition of well-defined professional skills, appropriate for a terminal degree and for professional employment. Their choice will guide which set of requirements the student will use in developing their Program of Study.

Minimum Credit Requirements: Students in both the Plan A and Plan B MS programs are required to complete a minimum of 30 semester credits (33 credits for Agricultural Science Education degree).

Time for Degree Completion: Masters programs must be completed in no more than five (5) years from the semester of admission or the semester in which the first class used towards degree was taken, whichever comes first.

GPA Expectations: A minimum 3.00 cumulative grade-point average is required for graduation by both University and Department policies. Grades are reviewed at the end of each semester by the advisor and Graduate Affairs and Curriculum Committee (the Graduate Secretary will provide GPA reports to faculty advisors and GACC each semester). If a student's overall GPA falls below 3.00, the student is placed on probation, will be notified by mail and/or email, and should schedule an appointment immediately with his/her major professor to discuss their academic progress. Under such conditions, the student will receive counseling, remediation recommendations, or other actions deemed appropriate to assist the student in more effectively achieving success. In consultation with their advisor, the student should develop a written plan to address deficiencies (to be placed in student's permanent file). Students placed on GPA-based probation

will have a maximum of two semesters to raise their GPA to at least 3.00. If this minimum is not achieved, the student is counseled by their major professor and may be required to withdraw from the MS program.

Filing of Program of Study: A written Formal Program of Study must be completed, approved and filed no later than during the first half of the student's second semester of their MS degree work. Students must use the official MSU Program of Study form (this is different from the internal degree planning form, printed on blue paper, which is used during discussion with your advisor in planning your degree program and laying out a tentative time schedule). A copy of this approved form will be filed in the student's permanent academic file.

Curriculum Requirements for the Master of Science Degree

The student's program of study must be developed in cooperation with and approved by the student's Guidance Committee and must include the requirements specified below.

NOTE: Collateral courses to overcome deficiencies may be required in addition to the requirements for the CARRS master's degree. Collateral course work will not count toward the minimum requirements for the master's degree.

Course Requirements for all Plan A and Plan B students:

Both of the following courses are required and should be taken during the student's first semester **(6 credits)**

- ACR 800, Foundations of Community, Agriculture, Recreation and Resource Studies **(3 credits)**
- ACR 802, Survey of Research Methods **(3 credits)**

Minimum of 15 credits of course work in a focus area (mirroring one of the four CARRS theme areas, **(15 credits)** or created in consultation with committee and consistent with scope/philosophy of the CARRS program: Relevant courses are selected in consultation with the student's Guidance Committee. At least 6 credits of this focus area must be selected from Community, Agriculture, Recreation and Resource Studies courses (courses with alpha codes of ACR, AEE, PRR, or RD).

Additional Plan A Requirements:

Quantitative or qualitative methods, **(min. of 3 credits)** to be selected in consultation with student's Guidance Committee and as appropriate for thesis needs.

ACR 899, thesis/research credits **(min. of 6 credits)**

Presentation and approval of thesis proposal.

Completion and defense of master's thesis.

Additional Plan B Requirements:

Techniques or skill-building **(min. of 3 credits)** course relevant to the student's academic and career goals, to be selected in consultation with the student's Guidance Committee.

Both of the following courses: **(6 credits)**

- ACR 895, Case Studies in CARRS **(3 credits)**
(See Appendix D for detailed description)
- ACR 898,* Master's Professional Project **(3 credits)**
(See Appendix D for detailed description)

Written plan for "personal professional project," with rationale linked to professional goals

Completion and defense of a paper based on the master's professional project/experience.

* ACR 898 credits can be deferred only up to two years. After that, they automatically convert to 0.0 grades.

See additional notes on the next page. → → → → →

NOTES:

400-level Courses: By MSU policy, more than half of the credits of the total required for a master's degree must be taken at the 800 and 900 levels, except as specifically exempted by the dean of the college. Courses at the 400 level may be applied to the master's degree program; however, when both a 400- and 800-level course are available and cover the same basic content, the 800-level course should be selected.

Transfer Credits: A maximum of 9 semester credits of graduate course work (excluding research and thesis credits) may be transferred into a 30-credit master's degree program from other accredited institutions or international institutions of similar quality, if they are appropriate to a student's program, the student received grades of 3.0 or higher, and provided courses were completed within the time limits approved for earning the degree (five years from date of first course used for the degree program). Courses used to meet requirements of another degree are not acceptable. The CARRS Department chairperson and the CANR Dean must approve use of such courses.

Research Information: MS-Plan A (thesis) students should review carefully the Research Guidelines section, page 35. Become familiar with the MSU Graduate School publication Formatting Guide for Master's Theses and Doctoral Dissertations. Available on-line at: <http://grad.msu.edu/format.htm>

Master of Science Plan A and Plan B Guidance Committees

Terminology

Initial Advisor: Advisor first assigned to applicants based on a match in interests and faculty member's capacity to accept new students. This person usually becomes the student's major professor (confirmed at the time of filing of official Program of Study), but the student has the right to identify a different major professor if they find someone more appropriate. A change can be made only if the newly identified faculty member agrees and has the capacity to accept another student.

Major Professor: Faculty member who serves as your primary advisor and mentor throughout your academic career at MSU

(Academic) Advisor: Used interchangeably with "Major Professor"

Guidance Committee Chairperson: Used interchangeably with "Major Professor"

Thesis Advisor: Usually your major professor, but under some circumstances it may be more appropriate for another faculty member (committee member) to serve as the thesis advisor.

Guidance Committee: Group of three regular faculty members, including your advisor, who work with you to develop your academic and curriculum plan, mentor you, and comprise your MS Final Examination committee. (For MS-Plan B students, the student's advisor functions in all roles, with the other committee members becoming involved only for the development, approval and final examination of the MS-Plan B project/experience.)

Guidance Committee Composition: Master of Science degree guidance committees will consist of a minimum of three (3) members. Two of these members, including the guidance committee chairperson, must be CARRS faculty members. The third member must be a faculty member from another academic unit. For Plan A students, all three committee members must be regular faculty members (see page 12 for definition); for Plan B students, at least two members must be regular faculty members. Requested exemptions must be in accordance with University and College of Agriculture and Natural Resources guidelines (see: <http://www.reg.msu.edu/UCC/AcademicPrograms.asp>)

The student should make an effort to identify, talk with, take classes from other faculty members to identify potential members of the Guidance Committee. The student's major professor may offer suggestions, but ultimately it is the student's responsibility to identify other committee members (based on match of interests and expertise with student's goals, and who can assist with various components of the graduate experience), talk with them and ask if the other faculty members are willing to serve on the committee. After the Guidance Committee members have been finalized, the student should schedule a committee meeting to discuss professional and academic goals, finalize the Program of Study, and begin preliminary discussions about the thesis or professional project.

A “**regular faculty member**” is defined as all persons appointed under the rules of tenure and holding the rank of professor, associate professor, assistant professor, or instructor, and persons appointed as librarians.

The composition of your Guidance Committee is checked for compliance by the Graduate Secretary, and is submitted for approval of the CARRS Department Chairperson and the CANR Dean, as indicated through their signatures on the Program of Study. Students always reserve the right to change any committee member. This is done by talking with (and getting approval) both the departing and incoming committee members, and explaining the change in a written letter to the Department Chair, with a copy to the Graduate Affairs Committee (submitted via the Graduate Secretary); this letter must be signed by the student, the departing committee member, and the incoming committee member. On rare occasions, the Department may make committee changes – with concurrence of the student – e.g., when a Committee member leaves the University for any reason. Typically, the student is informed and the same procedure followed for student-initiated changes is followed. The Department does not “assign” committee members.

Certifying Examination for Master of Science

- The Plan A Certifying Examination will be the student’s thesis defense.
- The Plan B Certifying Examination will focus on the student’s Professional Project.

The student’s Guidance Committee will administer the Certifying Examination. Both will be oral examinations that include a public presentation by the student of his/her thesis or project. The student’s Guidance Committee will decide on the specific format to be used in examining the student, to include the balance between the public presentation and closed examination portions of the session.

Master of Science Degree Calendar & Progress Checklist

Prior to Attending the First Semester of Classes

- ☐ **Attend** the required CARRS Department graduate student orientation (generally held the Friday morning preceding the first week of classes). Students are invited and strongly encouraged to participate in orientation activities offered by the Graduate School (and, for international students, by the Office of International Studies and Programs.)
- ☐ **Review** the description of the Master's Program available on the department's web site and in this handbook.
- ☐ **Familiarize** yourself with CARRS faculty (brief biographies are available on the CARRS web site), Department and University policies, and course lists (both associated with the CARRS department and elsewhere on campus).
- ☐ **Contact** your initial academic advisor when you arrive in East Lansing to discuss degree requirements, to identify possible courses (especially those for the first semester), and to discuss other student-related concerns.
- ☐ **Formalize** assistantship expectations and paperwork (if relevant): If you have been awarded an assistantship or are otherwise employed on campus, contact your supervisor immediately to complete appropriate paperwork, discuss your assignment and schedule, and address any issues related to your employment. Note that, if you have an assistantship, you are responsible for working during the entire term of your appointment. (Efforts should be made to not schedule assistants to work on designated University holidays, if possible.)

Fall semester appointments:	August 16 - December 31
Spring semester appointments:	January 1 - May 15
Summer appointments:	May 16 - August 15
- ☐ **Register** for classes.
 1. Master's students must be registered for a minimum of 9 credits per semester (6 if hired as a graduate assistant) to be considered "full time"
 2. Master's students must register for both ACR 800 and ACR 802 during their first semester (fall).

First Semester

- ☐ **Take** ACR 800 and ACR 802, the two required core CARRS courses (offered fall semester).
- ☐ **Select/confirm** your formal Academic Advisor. (This most often will be your initial advisor; however, students reserve the right to identify a different regular faculty member as long as that faculty member agrees to serve in that capacity.) With Advisor, develop a plan for regular meetings (timing, format, frequency) with your Advisor (varies by faculty). It is your responsibility to maintain communications with your Advisor.
- ☐ **Draft** a Proposed Academic Program Plan, which identifies courses to be taken to meet degree requirements. Discuss your proposal with your Advisor, using the internal planning form (blue, received during CARRS Graduate Orientation) to record and modify, as necessary, and to identify when you might take each of the courses.
- ☐ **Discuss** possible Guidance Committee members with your Advisor. (NOTE: the Guidance Committee should consist of your academic advisor, another regular faculty member from the department and a regular faculty member from outside of the department who represents your minor/cognate area of study).
- ☐ **Select** Guidance Committee members.
- ☐ **Schedule** and **hold** an official meeting with your Guidance Committee to discuss your academic and professional goals, and to discuss and obtain approval for your Proposed Academic Program Plan of courses. You may also wish to discuss preliminary Thesis or Applied Project topics with your committee at this time.

(If you find it impossible to schedule this meeting during the first semester, you should be sure to hold the meeting during the first half of your second semester at MSU.)

HELPFUL HINT: It is the student's responsibility to find a date appropriate for all Guidance Committee members, to schedule a room, prepare an agenda (in consultation with Advisor), and prepare the room as needed (suggestions include providing appropriate audio-visual aids, written agenda, preparing relevant written plans and forms [as appropriate to the meeting agenda], and [optional, depending on time of day] providing light snacks and/or beverages).

- ☐ **Obtain** a copy of the Graduate Packet (from the Graduate School) on-line at <http://grad.msu.edu/current/packet.htm> and review University Graduate Education Overview : <http://grad.msu.edu/about.htm>

Second Semester

- ☐ **If Provisional Acceptance:** Meet all provisional requirements as specified in letter of acceptance (or plan developed with your Advisor). After confirmation review by the Graduate Affairs Committee, have Graduate Secretary convert your "provisional" status to "regular." (This may be at the end of the first or second semester.)
- ☐ **Hold** your first Guidance Committee meeting within the first half of your second semester if not done during your first semester. (See notes under "First Semester.")

HELPFUL HINT: Many faculty members are on Academic Appointments (9-month) rather than Annual Appointments (all year), so be sure to schedule committee meetings and other committee activities (including reading of proposals and thesis/project drafts) when they are officially on duty. Exceptions can be made with the approval of all committee members; however, you should plan your work with respect for faculty appointments. Often they are involved in field research, study abroad programs, or otherwise away from the University during the time outside of their appointments. Most often this is during the summer; however, some faculty have non-traditional schedules. Be sure to find out appointments and schedules of your Guidance Committee members.

- ☐ **Finalize** your program plan; complete and submit your final Proposed Academic Program form for appropriate signatures. Form is available from Graduate Secretary or on the CARRS web site. A copy of your completed, approved form will be placed in your permanent academic file.
- ☐ **Discuss** with your Academic Advisor, then your committee, your ideas for a Plan A Thesis or Plan B Applied Project. (This can be done during your first Guidance Committee meeting.)
- ☐ **Prepare** a written draft of your Plan A Thesis or Plan B Applied Project proposal. Discuss it with your advisor and secure his/her approval prior to submitting it to your Guidance Committee.

Second or Third Semester

- ☐ **Make** necessary corrections in your proposal (based on the feedback from your advisor) and schedule a meeting of your Guidance Committee to discuss your proposal. (Provide each member of your Guidance Committee with a copy of your proposal at least two weeks prior to the committee meeting.)
- ☐ **Hold** an official meeting of your Guidance Committee to discuss and approve your proposal and review progress on your academic program.
- ☐ **Present** your proposal at a public forum (open to attendance by other graduate students and faculty). This can be done at the same time as your Guidance Committee meeting, if this is preferred and is approved by your Committee. Such public presentations allow students and faculty to interact, provide comments, ask questions and engage in scholarly debate as part of their academic and professional continuing development.
- ☐ **Complete** the necessary forms to secure approval from the University Committee on Research Involving Human Subjects (UCRIHS), as appropriate to your research. Instructions and application templates are available on-line: <http://www.humanresearch.msu.edu/>

Last Semester

Early Semester Logistics

- ☐ **Check** deadline dates for that semester as pertain to completing the MS degree at:
<http://grad.msu.edu/current/final.htm>.
(For Plan A students: Thesis must be submitted to the Graduate School by 5:00 p.m. on the date listed in order to meet graduation requirements.)
- ☐ **Enroll** for a minimum of one (1) credit. A master's student **MUST BE ENROLLED FOR CREDIT** during the semester he/she presents and defends the Plan A Thesis or Plan B Applied Project (considered the certification exam for the MS degree), and applies for graduation.
- ☐ **Check** StuInfo to be sure all DFs (deferred grades) have been converted to grades and that your GPA is at least 3.00.
- ☐ **Complete** and **submit** the on-line Application for Graduation early in the semester of planned graduation:
<http://www.reg.msu.edu/StuForms/GradApp/GradApp.asp>

Completion of Thesis/Applied Professional Project

- ☐ **Complete** your Thesis or Applied Project (be sure to get all needed approvals, such as UCRIHS, any possible approvals by research/project funding organizations, committee approvals, etc.)
(MS-Plan A students: Obtain a copy of the Thesis/Dissertation Submission Packets from the Graduate School web site: <http://grad.msu.edu/current/packet.htm>)
- ☐ **Submit** a draft copy of your Thesis or Applied Project to your advisor (and Guidance Committee members, if requested). Committee member(s) will review and comment on your draft.

HELPFUL HINT: Students should have peers (and, if needed, professional editors) review and provide editorial recommendations for your thesis/project paper prior to submission to your Advisor and Guidance Committee.

- ☐ **Edit** your draft, as needed.
- ☐ **Schedule** a seminar/examination time with your Guidance Committee for officially presenting and defending your work. This “seminar” is an open session to which students and faculty in the CARRS Department (and building) should be invited. You should place seminar announcements in faculty and student mailboxes/folders, post electronically, and post as fliers in the Natural Resources Building at least two weeks prior to the seminar. Electronic reminders can be distributed via the Department listserve closer to the scheduled seminar date.
- ☐ **Provide** your advisor and each member of your Guidance Committee a hard copy (unless a digital is specified as preferred by individual committee members) of your Thesis or Applied Project paper at least 2 weeks prior to the **seminar**.
- ☐ **Present** your Thesis or Applied Project at the seminar. Following the public presentation and Q&A session, visitors will be excused. You will continue to meet with your Guidance Committee to continue the Certifying Examination portion of the session. Committee members will provide suggestions for changes, expansions, clarifications, and other edits.
- ☐ **Make** all appropriate changes as suggested by your Guidance Committee. Provide the revised version, as requested, and obtain their approval, confirmed by signature on the Thesis Approval form. Contact the Graduate Secretary or check the CARRS web site for the form to be signed by all Guidance Committee members.

Completion of Thesis/Applied Professional Project (*cont.*)

- ☐ **Assemble** the Thesis or Applied Project according to the Graduate School Guidelines. Submit bound copies as appropriate. (If a Thesis, the Graduate School must receive an unbound copy. Hard-bound copies must be provided to the Department, Advisor and Guidance Committee members. [Individual faculty members may request an alternative format, such as soft-bound, unbound, or digital. If digital, this should be provided as a PDF file rather than a word processing file.] If An Applied Project, The Graduate School does not receive a copy. The Department and Advisor should receive bound copies. Other Guidance Committee members may request a copy.)
<http://www.msu.edu/user/gradschl/format.htm>

Additionally, you must prepare an abstract of your MS thesis. This should not exceed 150 words.

Final Logistics:

- ☐ Read and comply with MSU's Exit Check List on-line at:
<http://www.msu.edu/user/gradschl/current/formatexit.pdf>
This is to assure that you have met all requirements and submitted all appropriate forms and other paperwork.
- ☐ Submit your on-line exit survey: https://ntweb11.ais.msu.edu/csp_gas/

HELPFUL HINT: All expenses associated with preparing a thesis or masters project (paper, printing, binding, photo-copying, photographic and art work, etc.) are the graduate student's responsibility, regardless of whether or not the project is supported by assistantship, Departmental, or other University funds.

Master of Science Forms and Timeline * Check-List

Name: _____

MS-Plan A ☐

or

First Semester of Degree Program: _____

MS-Plan B ☐

Academic Advisor: _____

* Timeline is based on a two-year completion; student progress may slow between “first” and “last” semesters for those taking between two (2) and five (5) years to complete their degree.

This form identifies only those steps requiring forms. See the “list” above for all steps to be completed.

Check Off	Semester	Form	Degree Process Steps
	Prior to Admission	<i>ALL Applicants: MSU application and recommendation forms :</i> http://www.msu.edu/user/gradschl/apply.htm <i>International Applicants: I-20:</i> http://www.isp.msu.edu/oiss/immigration/pdf/f-1/I-20_request.pdf Statement of Financial Proof http://grad.msu.edu/apply.htm	Apply for admission
	Prior to First	If you have an assistantship, Find on-line forms: for Payroll/W-2, Federal W-4, Direct Deposit form at https://ntweb11.ais.msu.edu/Payess/AppEntry.Asp for I-9: at https://ntweb11.ais.msu.edu/payess/AppLogin.Asp?Error=Security&App=GA appointment forms: Available through accountants	Make financial arrangements and complete relevant forms; see Dept. Accountants
	First	Internal degree planning form (blue) (see Graduate Secretary or CARRS web site)	Begin course planning
	Second	CANR Master of Science Degree Proposed Academic Program (see Graduate Secretary or CARRS web site)	Finalize formal degree program with Advisor, committee; get their signatures plus those of Chairperson and Dean
	Second or Third	MS-A Students: UCRIHS (University Committee on Research Involving Human Subjects) application template and guidelines http://www.humanresearch.msu.edu/	Review and complete (as needed) the human subjects review document, following the template and guidelines provided by UCRIHS
	Each semester, as needed	Assistantship or other wage forms, as relevant to work pattern – (see Accountants)	Complete assistantship or wage paperwork, as needed
	Last (early)	Application for Graduation: http://www.reg.msu.edu/StuForms/GradApp/GradApp.asp	Apply for graduation early in semester of graduation
	Last	MS-Plan A: Report on Master’s Final Examination (Plan A) MS-Plan B: Completion of Plan B Project Presentation/Defense (see Graduate Secretary)	After successfully defending your MS thesis or project, complete, get signatures and submit all forms
	Last	Exit Interview and Exit Checklist https://ntweb11.ais.msu.edu/csp_gas/ http://www.msu.edu/user/gradschl/current/formatexit.pdf	Complete MSU’s on-line exit survey

• Doctor of Philosophy Program •

The Doctor of Philosophy in Community, Agriculture, Recreation and Resource Studies is designed to enable students to generate new knowledge in complementary fields responsive to rapidly changing conditions in our communities, natural environments, tourism and recreation, and agricultural systems. In addition to meeting the requirements of the University and of the College of Agriculture and Natural Resources, students must meet the requirements specified below.

Admission

To be admitted to the Doctor of Philosophy degree program in Community, Agriculture, Recreation and Resource Studies, a student must have completed a master's degree. Relevant experience and strong academic backgrounds in the natural, physical, or social sciences, including independent research experience, are strongly encouraged. All applicants for admission are required to submit scores from the General Test of the Graduate Record Examination (GRE). (Note that at the time of submission, the GRE scores can be no more than five [5] years old.). International applicants are required to take the TOEFL exam to assess English reading, listening, speaking and writing abilities. (Note that at the time of submission, TOEFL scores can be no more than two [2] years old.)

See Application & Admissions Process section (page 39) for details about materials required for submission. Note that a student's acceptance remains in force for one (1) year after the semester for which the student initially applies. If a student must delay start of their academic program for a year or less, they do not need to re-apply. However, if the delay is longer than one year, the student must complete the application process again, including updated support materials, as needed.

General Requirements for the Doctor of Philosophy Degree

In addition to meeting the requirements of the University and of the College of Agriculture and Natural Resources (CANR), students must meet the requirements specified below.

Minimum Credit Requirements: Doctoral students are required to complete a minimum of 60 semester credits beyond their Master's degree (24 of these credits are allocated to dissertation research).

Time for Degree Completion: Doctoral programs must be completed in no more than eight (8) years from the semester of admission or the semester in which the first class used toward the degree was taken, whichever comes first.

GPA Expectations: A minimum 3.00 cumulative grade-point average is required for graduation by both University and Department policies. Grades are reviewed at the end of each semester by the advisor and Graduate Affairs and Curriculum Committee (the Graduate Secretary will provide GPA reports to faculty advisors and GACC each semester). If a student's overall GPA falls below 3.00, the student is placed on probation, will be notified by mail and/or email, and should schedule an appointment immediately with his/her major professor to discuss their academic progress. Under such conditions, the student will receive counseling, remediation recommendations, or other actions deemed appropriate to assist the student in more effectively achieving success. In consultation with their advisor, the student should develop a written plan to address deficiencies (to be placed in student's permanent file). Students placed on GPA-based probation will have a maximum of two semesters to raise their GPA to at least 3.00. If this minimum is not achieved, the student is counseled by their major professor and may be required to withdraw from the Ph.D. program. In some cases, the alternative of completing a MS degree may be offered.

Filing of Program of Study: A written, formal Program of Study must be completed, approved and filed no later than during the first half of the student's second semester of their Ph.D. degree work. Students must use the official MSU Program of Study form (this is different from the internal degree planning form, printed on yellow paper, which is used during discussion with your advisor in planning your degree program and laying out a tentative time schedule). A copy of this approved form will be filed in the student's permanent academic file.

Curriculum Requirements for the Doctor of Philosophy Degree

The student's program of study must be developed in cooperation with and approved by the student's Guidance Committee and must include the requirements specified below.

NOTE: Collateral courses to overcome deficiencies may be required in addition to the requirements for the CARRS doctoral degree. Collateral course work will not count toward the minimum requirements for the doctoral degree.

COURSES

Required Core Course:

(3 credits)

Complete Foundations of Community, Agriculture, Recreation and Resource Studies, ACR 800 (3 credits).

Note: Ph.D. students who took ACR 800 as part of their MS CARRS degree, or RD 800 as part of their RD MS degree, may submit a course waiver/substitution proposal, as approved by their advisor/committee.

Advanced Research Methods:

(9 credits)

Complete 9 credits of course work in advanced research methods, to be selected in consultation with your Advisor and Guidance Committee, including at least 3 credits in each of quantitative and qualitative methods.

Research courses should be beyond the basic MS research courses, and should be selected to provide broad research background as well as to prepare the student to deal with methods and statistics needed for the planned dissertation work.

Focus Areas (2):

(24 credits)

Complete a minimum of 24 credits of course work across two focus areas. Each of the two focus areas must include at least 9 credits. At least one course in each focus area must be selected from Community, Agriculture, Recreation and Resource Studies courses (ACR alpha code). The other six credits may be associated with one or both of the focus areas. (During the curriculum transition period, focus area courses also may be selected from courses identified with alpha codes associated with the three former departments: AEE, PRR, RD.)

Focus areas may mirror one or two of the four CARRS themes, or be created – in consultation with the Guidance Committee -- to meet the student's professional goals. Self-defined focus areas should be consistent with/complementary to the scope and philosophy of the CARRS program.

Dissertation Research:

(24 credits)

Complete a minimum of 24 credits of ACR 999 (dissertation research). Present the results of the research in a public seminar and successfully defend the dissertation during the final oral examination within eight years of the first class taken toward the Ph.D. degree, and after and within three years from the comprehensive examination completion date.

Additional Requirements – Comprehensive Examination Packet

Each student must prepare a comprehensive examination packet/program statement that presents in an integrated fashion the student's learning and professional background and goals, and provides a rationale for the student's declared focus areas. This statement is prepared in consultation with the student's guidance committee and is available to the full faculty for review. This packet should be prepared as soon as possible (within the first year) to allow the student as much time as possible to prepare for the comprehensive examination.

Recommended components for the comprehensive examination packet include:

- Summary of the student's prior academic and professional background, including the rationale for the decision leading to enrolling in a doctoral program.
- Discussion of the student's academic and professional goals (to include evidence of the fit within the philosophical foundations of the CARRS program).
- Identification, rationale and discussion of the student's two chosen focus areas, explaining how they support their academic and professional goals. This discussion should provide a rationale for selection of the courses to be taken for each focus area.

Comprehensive Examination Packet (cont.)

- Outline of the student's plan for preparing for the comprehensive exam (which might include things such as a reading list [foundational, seminal literature as well as recent journal articles], with a plan for processing [e.g., annotated bibliography and synthesis writing]; paid or voluntary work on research projects; participation in professional conferences; work with the MSU Writing Center; and other activities that will facilitate success).

The packet should include as attachments:

- Copy of your degree planning form (listing courses by the categories identified above: core, advanced research methods, focus area 1, focus area 2, dissertation research).
- Copy of your resumé.

Additional Requirements – Comprehensive Examination

Purpose: The purpose of the comprehensive exam is to provide students the opportunity to demonstrate their comprehensive knowledge of the interdisciplinary breadth and disciplinary depth (“T-shaped” model of graduate students; see page 46) of their studies – from courses, professional reading, and personal thinking, and as covering content presented in their comprehensive examination packet. Additionally, the student should be able to demonstrate through the exam their ability to synthesize, apply and coherently present arguments based on this knowledge. Special emphasis is placed on the student's understanding and application of interdisciplinary, holistic and systemic approaches. Finally, the exam serves to demonstrate the student's ability for independent thinking, carefully crafted writing, and their overall preparation for successful completion of dissertation research.

General Information and Timeline: The comprehensive examination should be taken after your prescribed course work is substantially complete (at least 80%) as defined by the Guidance Committee and as presented in your Proposed Program of Study. The exam must be completed within five years of the first course used to meet your Ph.D. degree requirements. The scope, content and structure of the exam is defined in collaboration with your committee, and is guided by your comprehensive examination packet and program statement. You must be enrolled for at least one credit during the semester(s) in which you take the exam.

Content: The exam - developed and administered by your Guidance Committee -- should cover the following content areas, as identified in your approved Comprehensive Examination Packet and Program Statement:

- Philosophical and theoretical foundations of the CARRS program
- Research methods
- Two focus areas (theory and practice)

If you are completing a specialization or certification that requires its own comprehensive examination component, this will be added to your examination.

Format: As indicated by University policy, at least one component of the comprehensive examination must be written (maintained in the CARRS Department's office for three years). The comprehensive examination will be a take-home, open-book exam, completed without assistance from others. Responses must be submitted within five days. The Guidance Committee, in consultation with the student, may decide if the student will receive all parts/questions of the exam at one time, to be completed in five days, OR if the various parts will be distributed throughout the week, with a specified amount of time for completion of each part. The Guidance Committee may elect to include an oral component to supplement or clarify the written exam. Detailed format guidelines must be presented in writing at least six (6) months prior to the earliest scheduled date for the exam.

Exam results, in whole or part, can be one of the following: Pass, Pass upon completion of specified remediation (re-writes, additional coursework, additional reading/writing, etc. as specified by the Guidance Committee), or No Pass. The student will receive a written assessment of their exam performance, supplemented by an oral discussion with the student's Major Professor. In your consists of more than one part, or you are required to complete exam remediation work or re-take all or part of the exam, the date that you pass the final part of the examination is the date recorded as the date you pass the examination. This exam must be completed before you can schedule your dissertation oral defense.

Re-taking the Exam: The exam - in whole, or specified parts - may be re-taken a maximum of two times. The student must wait a minimum of one semester and a maximum of two semesters from the time of the previous exam attempt to re-take the exam. If a student does not schedule and complete a re-take of the exam within specified time frames, they will be counseled about their “degree progress,” with the possibility of being withdrawn from the program.

NOTES:

400-level Courses: In general, doctoral students should be selecting courses at the 800 and 900 levels. However, in some cases there may be a legitimate rationale to include courses at the 400 level (for example, when no comparable course exists at the 800 or 900 level). Guidance Committee members may request that, to use a 400-level course, the student supplement the basic course content with some form of scholarly graduate-level work, although this is not mandatory. If such a requirement is added, it should be agreed to by the course instructor.

Transfer Credits: Graduate credits (excluding research credits) may be transferred from other accredited institutions or international institutions of similar quality, if they are appropriate to a student’s program, the student received grades of 3.0 or higher, and provided that the courses were completed within the time limits approved for earning the degree (eight [8] years from date of first course used for the Ph.D. degree program). Courses used to meet requirements of another degree are not acceptable. The CARRS Department chairperson and the CANR Dean must approve use of such courses.

Research Information: All doctoral students should review carefully the Research Guidelines section, page 35. Become familiar with the MSU Graduate School publication Formatting Guide for Master’s Theses and Doctoral Dissertations. Available on-line at: <http://grad.msu.edu/format.htm>

Doctor of Philosophy Guidance Committees

Terminology

Initial Advisor: Advisor first assigned to applicants based on a match in interests and faculty member’s capacity to accept new students. This person usually becomes the student’s major professor (confirmed at the time of filing of official Program of Study), but the student has the right to identify a different major professor if they find someone more appropriate. A change can be made only if the newly identified faculty member agrees and has the capacity to accept another student.

Major Professor: Faculty member who serves as your primary advisor and mentor throughout your academic career at MSU.

(Academic) Advisor: Used interchangeably with “Major Professor”

Guidance Committee Chairperson: Used interchangeably with “Major Professor”

Dissertation Advisor: Usually your major professor, but under some circumstances it may be more appropriate for another faculty member (committee member) to serve as the dissertation advisor. One example is students using a Hospitality Business faculty member as the dissertation advisor, even though the degree is in the CARRS Department.

Guidance Committee: Group of four regular faculty members, including your advisor, who work with you to develop your academic and curriculum plan, mentor you, and comprise your Doctoral Final Examination committee (dissertation defense).

Guidance Committee Composition: Doctoral degree guidance committees will consist of a minimum of four (4) members. Two of these members, including the guidance committee chairperson, must be CARRS regular faculty members. The third member must be a regular faculty member from another academic unit. The fourth member must also be a regular faculty member, but may be from either within or outside the CARRS Department. At least three Committee members must have an earned Ph.D. preferably in a field related to those of the student's interests/focus areas. The guidance committee also will serve as the student's examination committee. Requested exemptions must be in accordance with University and College of Agriculture and Natural Resources guidelines (see: <http://www.reg.msu.edu/UCC/AcademicPrograms.asp>).

The committee must be formed within the first two semesters of the student's degree program. The student should make an effort to identify, talk with, take classes from other faculty members to identify potential members of the Guidance Committee. The student's major professor may offer suggestions, but ultimately it is the student's responsibility to identify other committee members (based on match of interests and expertise with student's goals, and who can assist with various components of the graduate experience), talk with them and ask if the other faculty members are willing to serve on the committee. After the Guidance Committee members have been finalized, the student should schedule a committee meeting to discuss professional and academic goals, finalize the Program of Study, and begin preliminary discussions about the dissertation research.

A “**regular faculty member**” is defined as all persons appointed under the rules of tenure and holding the rank of professor, associate professor, assistant professor, or instructor, and persons appointed as librarians.

The composition of your Guidance Committee is checked for compliance by the Graduate Secretary, then approved by the CARRS Department Chairperson and the CANR Dean, as indicated through their signatures on the Program of Study. Students always reserve the right to change any committee member. This is done by talking with (and getting approval) both the departing and incoming committee members, writing a letter to the Department Chair and copied to the Graduate Affairs Committee (submitted via the Graduate Secretary) explaining the change request, and being signed by the student, the departing committee member, and the incoming committee member. On rare occasions, the Department may make changes -- with concurrence of the student -- such as in cases when a Committee member leaves the University for any reason. Typically, the student is informed and the same procedure followed for student-initiated changes is followed. The Department does not “assign” a committee member.

Certifying Examination for Doctor of Philosophy

The Doctoral Certifying Examination will be the student's dissertation defense.

The student's Guidance Committee will administer the Certifying Examination. This will include a public presentation by the student of his/her dissertation. The student's Guidance Committee will decide on the specific format to be used in examining the student, to include the balance between the public presentation and closed examination portions of the defense.

Doctor of Philosophy Degree Calendar and Progress Checklist

Prior to Attending the First Semester of Classes

- ☐ **Attend** the required CARRS Department graduate student orientation (generally held during the Friday morning preceding the first week of classes). Students also are invited and strongly encouraged to participate in orientation activities offered by the Graduate School (and, for international students, by the Office of International Studies and Programs.)
- ☐ **Review** the description of the Doctoral Program available on the department's web site and in this handbook.
- ☐ **Familiarize** yourself with CARRS faculty (brief biographies are available on the CARRS web site), Department and University policies, and course lists (both associated with the CARRS department and elsewhere on campus).
- ☐ **Contact** your initial academic advisor when you arrive in East Lansing to discuss degree requirements, to identify possible courses (especially those for the first semester), and to discuss other student-related concerns.
- ☐ **Formalize** assistantship expectations and paperwork (if relevant): If you have been awarded an assistantship or are otherwise employed on campus, contact your supervisor immediately to complete appropriate paperwork, discuss your assignment and schedule, and address any issues related to your employment. Note that, if you have an assistantship, you are responsible for working during the entire term of your appointment. (Efforts should be made to not schedule assistants to work on designated University holidays, if possible.)

Fall semester appointments:	August 16 - December 31
Spring semester appointments:	January 1 - May 15
Summer appointments:	May 16 - August 15
- ☐ **Register** for classes.
 1. Doctoral students must be registered for a minimum of 6 credits per semester to be considered "full time." (After the student has completed his/her comprehensive exam(s), he/she may be considered "full time" with 1 credit as long as he/she has informed the Registrar's Office of her/his status and intent.)
 2. Doctoral students must register for ACR 800 during their first semester (fall).

First Semester

- ☐ **Take** ACR 800, the required core CARRS course (offered fall semester).
- ☐ **Select/confirm** your formal Academic Advisor. (This most often will be your initial advisor; however, students reserve the right to identify a different regular faculty member as long as that faculty member agrees to serve in that capacity.) With Advisor, develop a plan for regular meetings (timing, format, frequency) with your Advisor (varies by faculty). It is your responsibility to maintain communications with your Advisor.
- ☐ **Draft** a Proposed Academic Program Plan, which identifies courses to be taken to meet degree requirements. Discuss your proposal with your Advisor, using the internal planning form (yellow, received during CARRS Graduate Orientation) to record and modify, as necessary, and to identify when you might take each of the courses.
- ☐ **Discuss** possible Guidance Committee members with your Advisor. (NOTE: the Guidance Committee should consist of your academic advisor, one regular faculty member from the CARRS department, one regular faculty member from outside of the department who represents one of your focus areas of study. The fourth member, also a "regular" faculty member, may be either from or outside the CARRS Department.)
- ☐ **Obtain** a copy of the Graduate Packet (from the Graduate School) on-line at <http://grad.msu.edu/current/packet.htm>, and review University Graduate Education Overview provided by the Graduate School: <http://grad.msu.edu/about.htm>

Second Semester

- ☐ **If Provisional Acceptance:** Meet all provisional requirements as specified in letter of acceptance (or plan developed with your Advisor). After confirmation review by the Graduate Affairs Committee, have Graduate Secretary convert your “provisional” status to “regular.” (This may be at the end of the first or second semester.)
- ☐ **Select** Guidance Committee members. (Student is responsible for identifying and meeting with potential members, to determine appropriateness, match of interests, and ability/willingness of faculty members to serve in this capacity.)
- ☐ **Schedule** and **hold** an official meeting with your Guidance Committee to discuss your academic and professional goals, and to discuss and obtain approval for your Proposed Academic Program Plan of courses. You may also wish to discuss preliminary Dissertation topics with your committee at this time.

HELPFUL HINT: It is the student’s responsibility to find a date appropriate for all Guidance Committee members, to schedule a room, prepare an agenda (in consultation with Advisor), and prepare the room as needed (suggestions include providing appropriate audio-visual aids, written agenda, preparing relevant written plans and forms [as appropriate to the meeting agenda], and [optional, depending on time of day] providing light snacks and/or beverages).

HELPFUL HINT: Many faculty members are on Academic Appointments (9-month) rather than Annual Appointments (all year), so be sure to schedule committee meetings and other committee activities (including reading of proposals and thesis/project drafts) when they are officially on duty. Exceptions can be made with the approval of all committee members; however, you should plan your work with respect for faculty appointments. Often they are involved in field research, study abroad programs, or otherwise away from the University during the time outside of their appointments. Most often this is during the summer; however, some faculty have non-traditional schedules. Be sure to find out appointments and schedules of your Guidance Committee members.

- ☐ **Finalize** your program plan; complete and submit your final Proposed Academic Program form for appropriate signatures. Form is available from Graduate Secretary or on the CARRS web site. A copy of your completed, approved form will be placed in your permanent academic file.
- ☐ **Discuss** with your Academic Advisor, then your Guidance Committee, your ideas for your dissertation research. (This can be done during your first Guidance Committee meeting.)
- ☐ **Discuss** with your Academic Advisor and your Guidance Committee the format and scope of your Comprehensive Examination so you can begin preparing early in your academic career.

In-between Semesters

- ☐ **Meet** with your Academic Advisor to discuss procedures and scope for your comprehensive examination packet and the comprehensive examination. (See previous section for detailed description.)
- ☐ **Prepare, submit** and **get approved** your comprehensive examination packet/program statement (see pages 19-20) with your Academic Advisor to discuss procedures and scope for your comprehensive examination packet and the comprehensive examination. (See previous section for detailed description.)

After 80% of Coursework has been Completed

Comprehensive Examination

- ☐ **Complete** your comprehensive examination(s).

Remember,, the comprehensive examinations *must* be completed before an oral defense of the dissertation can be scheduled. (See Graduate Secretary for the form Record of Comprehensive Examinations for Doctoral Degree and Educational Specialist Degree Candidates.)

- ☐ **Follow up** with remediation or re-takes of the comprehensive examination(s), *if needed*.

Dissertation (depending on guidance from your Committee, some of these steps may occur earlier, during the “in between” semesters)

- ☐ **Prepare** (based on earlier discussions about dissertation ideas) a written draft of your Dissertation proposal. Discuss it with your advisor, revise/edit and secure his/her approval prior to submitting it to your Guidance Committee.
- ☐ **Make** necessary corrections in your proposal (based on the feedback from your Advisor, and Committee members, as they elect to be involved)
- ☐ **Hold** an official meeting of your Guidance Committee to discuss and approve your proposal and review progress on your academic program. (Provide each member of your Guidance Committee with a copy of your proposal at least two weeks prior to the committee meeting.)
- ☐ **Present** your proposal in a public forum (open to attendance by other graduate students and faculty). This can be done at the same time as your Guidance Committee meeting (item above), if this is preferred and is approved by your Committee. Such public presentations allows students and faculty to interact, provide comments, ask questions and engage in scholarly debate as part of their academic and professional continuing development.
- ☐ **Complete** the necessary forms to secure approval from the University Committee on Research Involving Human Subjects (UCRIHS), as appropriate to your research. Instructions and application templates are available on-line: <http://www.humanresearch.msu.edu/>

Last Semester

Early Semester Logistics

- ☐ **Check** deadline dates for that semester as pertain to completing the Ph.D. degree at: <http://grad.msu.edu/current/final.htm>.
(Dissertation must be submitted to the Graduate School by 5:00 p.m. on the date listed in order to meet graduation requirements.)
- ☐ **Enroll** for a minimum of one (1) credit. A doctoral student **MUST BE ENROLLED FOR CREDIT** during the semester he/she presents and defends the Dissertation (considered the certification exam for the Ph.D. degree), and applies for graduation. See <http://www.reg.msu.edu/roinfo/enrollment.asp>
- ☐ **Check** StuInfo to be sure all DFs (deferred grades) have been converted to grades and that your GPA is at least 3.00. You cannot graduate unless these two conditions have been met.
- ☐ **Complete** and **submit** the on-line Application for Graduation early in the semester of planned graduation: <http://www.reg.msu.edu/StuForms/GradApp/GradApp.asp>

Completion of Dissertation

- ☐ **Complete** your Dissertation
Steps include instrument development, UCHRIS approval (if needed), data collection, data analysis, and dissertation writing and editing.
(Obtain a copy of the Theses/Dissertation Submission Packets from the Graduate School web site:
<http://grad.msu.edu/current/packet.htm>)
- ☐ **Complete** all required forms. Doctoral candidates must go to <http://grad.msu.edu/current/packet.htm> for the bookplate, Human and/or Animal Research consent form, University Microfilms Agreement, color images form, information material, and questionnaires. These forms *must* be completed and returned to the Graduate School with your doctoral dissertation.
- ☐ **Submit** a draft copy of your Dissertation to your advisor (and Guidance Committee members, if requested). Committee member(s) will review and comment on your draft.

HELPFUL HINT: Students should have peers (and, if needed, professional editors) review and provide editorial recommendations for your dissertation prior to submission to your Advisor and Guidance Committee.

- ☐ **Edit** your draft, as needed. See <http://grad.msu.edu/current/formatfinal.pdf> for format guidelines.
- ☐ **Schedule** a seminar/examination time with your Guidance Committee for officially presenting and defending your work. This “seminar” is an open session to which students and faculty in the CARRS Department (and building) should be invited. You should place seminar announcements in faculty and student mailboxes/folders, post electronically, and post as fliers in the Natural Resources Building at least two weeks prior to the seminar. Electronic reminders can be distributed via the Department listserv closer to the scheduled seminar date.
- ☐ **Provide** your advisor and each member of your Guidance Committee a hard copy (unless a digital copy is specified as preferred by individual committee members) of your Dissertation at least 2 weeks prior to the seminar. At this same time, a copy of the dissertation (marked “DRAFT” either at the bottom of each page or via a watermark on each page) should be made available to other CARRS faculty members for their review.
- ☐ **Present** and **defend** your Dissertation at the seminar. Defense format will include the following components:
 - Begin with presentation of student’s dissertation (use appropriate visual and other aids).
 - Provide the opportunity for public questioning of the student.
 - Following the public presentation and Q&A session, visitors will be excused. Student continues to meet with his/her Guidance Committee to continue the Certifying Examination/Defense portion of the session in a “closed door” format. Committee members will provide suggestions for changes, expansions, clarifications, and other edits.
- ☐ **Make** all appropriate changes as suggested by your Guidance Committee. Provide the revised version, as requested, and obtain their approval, confirmed by signature on the Dissertation Approval form. (See Graduate Secretary for the form Record of Dissertation and Oral Examination Requirements for Doctoral Degree Candidate, to be signed by all Guidance Committee members.)
- ☐ **Type/organize** your final copy of the Dissertation according to the Graduate School Guidelines. (It can be very helpful to take the first chapter of your dissertation to the Graduate School Office to have them check your document for compliance with MSU formatting guidelines). <http://www.msu.edu/user/gradschl/format.htm>
Additionally, you must prepare an abstract of your Ph.D. dissertation to be filed with “Dissertation Abstracts.” (This can be done earlier, and included in the draft prior to your defense. However, this is one of the Graduate School Requirements.)

- ☐ **Submit** an unbound copy of your dissertation to The Graduate School. Hard-bound copies must be provided to the Department, Advisor and Guidance Committee members. (Individual committee members may request an alternative format, such as soft-bound, unbound, or digital copy. If digital, this should be provided as a PDF file rather than a word-processed file.)

Final Logistics:

- ☐ **Read and comply** with MSU's Exit Check List on-line at:
<http://www.msu.edu/user/gradschl/current/formatexit.pdf>
This is to assure that you have met all requirements and submitted all appropriate forms and other paperwork.
- ☐ **Submit** your on-line exit survey: https://ntweb11.ais.msu.edu/csp_gas/
- ☐ **Complete** all final forms/questionnaires required by The Graduate School. Pay final fees.
- ☐ **Prepare** for commencement; see guidelines and checklists provided by the University:
<http://www.msu.edu/unit/acadevnt/commencement/>

HELPFUL HINT: All expenses associated with preparing a dissertation (paper, printing, binding, photocopying, photographic and art work, etc.) is the graduate student's responsibility, regardless of whether or not the project is supported by assistantship, Departmental, or other University funds.

Doctor of Philosophy Forms and Timeline* Checklist

Name: _____

First Semester of Degree Program: _____

Academic Advisor: _____

* Doctoral students have a maximum of eight years from semester of admission (or first class counted toward the degree, whichever is earliest) to complete their Ph.D. The degree must be completed within three (3) years of completing the Comprehensive Exam. This form identifies only the steps requiring forms. See “list” above for all steps to be completed.

Check Off	Semester	Form	Degree Process Steps
	Prior to Admission	<i>ALL Applicants: MSU application and recommendation forms :</i> http://www.msu.edu/user/gradschl/apply.htm <i>International Applicants: I-20:</i> http://www.isp.msu.edu/oiss/immigration/pdf/f-1/I-20_request.pdf Statement of Financial Proof http://grad.msu.edu/apply.htm	Apply for admission
	Prior to First	If you have an assistantship, Find on-line forms: for Payroll/W-2, Federal W-4, Direct Deposit form at https://ntweb11.ais.msu.edu/Payess/AppEntry.Asp for I-9: at https://ntweb11.ais.msu.edu/payess/AppLogin.Asp?Error=Security&App=GA appointment forms: Available through accountants	Make financial arrangements and complete relevant forms; see Dept. Accountants
	First	Internal degree planning form (yellow) (see Graduate Secretary or CARRS web site)	Begin course planning
	Second	CANR Doctor of Philosophy Proposed Academic Program (see Graduate Secretary or CARRS web site)	Finalize formal degree program plan with Advisor, committee; get their signatures plus those of Chairperson and Dean
	After 80% of Course Work is Completed	Comprehensive Examination Report of Completion (see Graduate Secretary)	Successfully take and pass all components of your comprehensive exam
	After 80% of Course Work is Completed	UCRIHS (University Committee on Research Involving Human Subjects) application template and guidelines http://www.humanresearch.msu.edu/	Review and complete the human subjects review document, following the template and guidelines provided by UCRIHS
	Semesterly, as needed	Assistantship or other wage forms, as relevant to work pattern – (see Accountants)	Complete assistantship or wage paperwork, as needed
	Last (early)	Application for Graduation: http://www.reg.msu.edu/StuForms/GradApp/GradApp.asp	Apply for graduation early in semester of graduation
	Last	Report on Dissertation Defense (see Graduate Secretary)	After defending dissertation, edit, get signatures and submit all forms
	Last	Exit Interview <i>and</i> Exit Checklist: https://ntweb11.ais.msu.edu/csp_gas/ http://www.msu.edu/user/gradschl/current/formatexit.pdf	Complete MSU’s on-line exit survey
	Last	Set of Final Forms: See http://www.msu.edu/user/gradschl/current/formatexit.pdf/	Complete all final forms/questionnaires required by The Graduate School, and pay final fees.

Example Doctoral Program of Study

Following is an example of a doctoral degree plan, structured showing the one required course, an example of a research series, and the student's two "focus areas." Note that focus areas may coincide with one of the department's identified four focus areas, an interdepartmental specialization or certificate, or a clear focus area developed by the student in consultation with the student's Advisor and Guidance Committee. The degree plan is developed to meet the student's academic and professional goals, to help them engage in independent research, and that is consistent with the broad scope of the CARRS graduate programs.

NOTE 1: The example shows more than the minimum number of required credits. Reasons might include transfer of additional courses from other Universities or programs, need for additional specific knowledge and skills to support dissertation research, or to address deficiencies (remediation requirements).

NOTE 2: Notice that the "focus area" labels do not correspond exactly with any of the CARRS theme areas, but they are consistent with and complementary to those themes and with the philosophy and scope of the department's mission

Course	Course Title	Credit	Semester	Grade
Core Course				
ACR 800	Foundations of Community, Agriculture, Recreation and Resource Studies	3		
Research Methods/ Statistics				
AEE 807	Educational Research Methods in ANR	3		
AEE 891	Selected Topics Agric. & Extension Education: Program Evaluation in ANR	3		
STT 421	Statistic I	3		
PRR 844	Research Methods Rec. Parks & Tourism	3		
TE 931	Qualitative Research Methods	4		
Total	5 Courses	16		
Focus Area 1: Agri. & Extension Education				
AEE 802	Educational Leadership in ANR	3		
AEE 804	Communication Strategies in ANR	3		
AEE 806	Program Planning & Evaluation in ANR	3		
AEE 990	Advanced Independent Study: Distance Adult Learning in ANR	3		
RD 876	International Rural Community Development	3		
CSS 890	Independent Study: Advanced Crop Production	3		
CSS 494	International Agriculture	1		
EAD 861	Adult Learning	3		
Total	8 Courses	22		
Focus Area 2: Agricultural Economics				
AEC 810	Institution & Behavioral Economics	3		
AEC 851	Agricultural Firm Management	3		
AEC 865	Agricultural Benefit-Cost Analysis	3		
Total	3 Courses	9		
Research Credits				
ACR 999	Dissertation Credits	24		

• **Inter-departmental Specializations** • (for Graduate Students)

See Appendix A

Following is a list of graduate specializations that students can consider using as part of their graduate program of study.

- Doctoral Specialization in Environmental Science and Policy (PhD only)
- Specialization in Environmental and Resource Economics (MS and PhD)
- Certification in the Museum Studies Program (any level)
- Specialization in Environmental Toxicology (MS) &
Multidisciplinary Program in Environmental Toxicology (PhD)
- Certification in the Watershed Management – Virtual Program (any level)
- Specialization in Gender, Justice and Environmental Change (MS and Ph.D)

• **Examples of Specific Research, Outreach & Training Programs** •

See Appendix B

Following is a list of sample research and training programs engaged in by faculty. Programs **bolded** below are described in the appendices as examples of these research, outreach and training programs.

- Rail-Trails and Trails Research Studies
- **Economic Impacts of Recreation and Tourism**
- **Non-Market Eco-System Research**
- **Program Evaluation Institute for Agriculture, Environmental, and Natural Resource Professionals**
- C.S. Mott Group

• Program Expectations and Support •

Professional Development, Academic Progress and Faculty Mentoring

Upon arrival of the student at MSU, the student and Advisor should devise a plan for regular meetings. The frequency and format will vary by student, faculty, and across the academic career of the student. The plan should meet the needs of both parties. The Major Professor's role is to serve as mentor for graduate students as well as to serve as their academic advisor. Students also have a lot to share with each other, as well as with faculty. A student's graduate experience is much more than "taking courses," and students are encouraged to make their graduate experience as rich as possible. Students are strongly encouraged to attend seminars, engage in active scholarly debate outside the classroom, read broadly, get involved in research and outreach activities (paid or volunteer), participate in professional conferences, and (when ready) begin writing professional articles for submission to professional magazines and journals.

In their role as mentors, faculty should model and provide encouragement for working as scholar-practitioners; discuss the nature and practicalities of research ethics and academic integrity; discuss University policies and procedures; involve students in extracurricular professional activities; review Department expectations; and discuss professional ethics and responsibilities.

Grade Point Average Expectations

Students must maintain a 3.0 cumulative grade-point average out of a possible 4.0 to remain in good standing. All student GPAs will be reviewed each semester. Students whose GPA falls below 3.00 will receive notification of such, indicating that they have been placed on probation. The student should schedule an appointment with their Advisor immediately to discuss the probationary status and to make plans to raise the GPA.

Academic Performance and Progress Assessment (Annual Review)

At least once a year, each student will have an annual progress assessment meeting with their Academic Advisor. The purpose of this process is for the student and advisor to review the student's progress, plan for the next year, to discuss ways to facilitate the student's success, and provide an opportunity for the student to request additional help, if needed.

Steps in the assessment process are to include the following:

1. Prior to the meeting, the student will write a **summary self-assessment**, describing their progress made in the preceding year, to include:
 - current GPA and student's assessment of course performance;
 - formal course and research/project progress (as related to progress requirements listed in the timeline/progress list), including how the student addressed "provisional" or "remediation" requirements, if relevant;
 - description and assessment of performance and learning in assistantship or other paid professional experience;
 - summary and assessment of supplemental activities such as:
 - ✓ engagement in paid or unpaid research/experiences relevant to the student's professional goals,
 - ✓ supplemental professional reading,
 - ✓ attendance at seminars,
 - ✓ participation in professional conferences,
 - ✓ writing and submission of professional articles,
 - ✓ engagement in community outreach activities related to their professional goals), and
 - ✓ any other activities supportive of scholarly academic and professional development;
 - description of personal strengths and challenges (including personal elements that may be challenging their progress);
 - a plan for what the student hopes to accomplish in the following year; and
 - suggestions for how the Advisor or the Department can help address their concerns or facilitate their degree work.

2. Student will submit their self-assessment to their Academic Advisor at least one week prior to the scheduled meeting.
3. Student and Advisor will meet to discuss the self-assessment and for the Advisor to provide his/her observations and assessments. Together they should discuss plans for the upcoming year, and discuss strategies for addressing deficiencies, if needed. The “degree calendar and progress checklist” provided in this handbook (p. 13 for MS, p. 23 for Ph.D.) may be used as a tool to aid this assessment.
4. Following the meeting, the Advisor will provide a written summary assessment of the student’s status and progress, including recommendations for enhancing their potential for successful completion of the degree.
5. A copy of both the student’s and Advisor’s written assessments will be placed in the student’s permanent file. Both assessment reports will be signed by both the student and the Academic Advisor.

Student Status: “Good Standing,” Probation and Dismissal (including Disciplinary Procedures)

Students not making adequate progress, or earning a cumulative GPA of less than 3.00, or engaging in unethical behavior may be placed on probation. Such a determination can be made after an unacceptable annual review, after a semester-by-semester review of GPAs, or after the occurrence of a severe incident requiring immediate intervention. Specific examples of conditions or actions that may result in probation are:

- Cumulative Grade Point Average (GPA) falling below 3.00. (A student will be placed on probation and given two semesters to raise the GPA above 3.00 before being removed from probation.)
- Violation of scholarly ethics and/or University policies. (Depending on the nature of the violation, the result may be probation or dismissal from the program/University.)
- Repeated failure to make academic progress, resulting in a recommendation by the Guidance Committee to be placed on probation or to be dismissed from the program.

In all cases, the first plan of action is to identify a plan for addressing challenges or the conditions leading to probation (with the exception of blatant violation of professional ethical standards and University policy). Students will be given a specified amount of time to address the deficiencies. If the student fails to address the deficiencies, the following process may be initiated:

- If the student’s Guidance Committee recommends consideration of dismissal or program termination, the case file will be reviewed by the Graduate Affairs and Curriculum Committee (GACC) to assess the merit of the case and the appropriateness of the opportunities provided for the student to remediate deficiencies or lack of progress.
- If termination or dismissal is recommended by the GACC, the student will be asked to participate in a meeting with the Associate Chairperson of CARRS and their Major Professor.
- If the student does not agree with the decision of the Department, they may move into the Grievance Procedures (see page 34).

Permanent Academic Advising Files (and student access)

The CARRS Department maintains a permanent academic file on each graduate student in the Graduate Secretary’s office. The student may have access to all records in their file, *with the exception of letters of recommendation for which they waived their right of access and records of GACC deliberations prior to acceptance*. If a student wants to review her/his file, he/she should schedule an appointment with the Graduate Secretary. Files must be reviewed in the Graduate Secretary’s office and may not be removed from that location. None of the file contents may be removed by the student.

If the student wishes to challenge the validity of any of the records, they may present a written challenge explaining the perceived inaccuracies along with supporting documentation. The written challenge should be submitted to the Associate Chairperson of CARRS, who will review the challenge and the file. The Associate Chairperson may consult with the Graduate Secretary, the student’s major professor, and the Chair of the Graduate Affairs and Curriculum Committee.

The Associate Chair will provide a written response to the student's challenge. If the student does not believe the issue has been resolved appropriately, they may file an official Grievance (see Grievance Procedures, page 34).

- All original application materials (application, test scores, letters of reference, former degree transcripts, statement of purpose and resume).
- Grade Reports each semester
- Correspondence between student and department faculty and staff
- Copies of fellowship and scholarship applications or nominations, plus award letters/forms
- Copies of all assistantship or other paid work records, as relevant
- Copies of written assistantship reviews
- Program Planning Form (blue for MS, yellow for Ph.D.)
- Copy of approved Proposed Program of Study (plus documentation of any changes in courses and/or committee members)
- Annual written progress assessment (including student's written self-assessment), used as the basis for student review each year
- Comprehensive Exam (written portion, kept for a minimum of 3 years)
- Summary written results of the comprehensive exam, plus (if needed) a written plan to address deficiencies, or a schedule and plan for re-taking the exam
- Written plan describing how the student will address deficiencies, or improve their GPA (if it falls below 3.00), if needed as a result of the annual review (or semester GPA check)
- Copies of all correspondence between the University and student
- Copies of any other MSU forms submitted on behalf of the student during their study

Conflict Resolution

To assist students and faculty confronting issues of conflict, the University has developed a program of support. The Conflict Resolution Program (<http://grad.msu.edu/conflict.htm>) provides tools that aid in preventing and resolving interpersonal conflict. Periodically workshops in conflict resolution are offered.

The CARRS Department Chairperson and Associate Chairperson are also available to consult with students who need assistance in resolving conflicts.

Full-time Status Requirements

International students on R and J visas are required to have full-time status. Domestic students may have other reasons for needing full-time status (insurance eligibility; eligibility for certain financial aid, scholarships, fellowships; etc.) MSU requires the following minimum enrollments to attain full-time status:

- Masters without assistantship:9 credits per semester
- Masters with assistantship: 6 credits per semester
- Doctoral without assistantship: 6 credits per semester
- Doctoral with assistantship: 3 credits per semester
- Doctoral students who have passed all required comprehensive exams:1 credit per semester

Grievance Procedures

Resolution of cases involving graduate student rights and responsibilities will be carried out according to Article 5 of Graduate Student Rights and Responsibilities (<http://www.vps.msu.edu/SpLife/gradrights.htm> follow link to download PDF file), which describes judicial procedures at the College and University levels.

Prior to engaging the College and University grievance procedures, students should explore all channels and grievance procedures within their home department for resolving grievance issues. The CARRS Department procedures (informal and formal) are as follows, as specified in the Department's Bylaws:

8. GRIEVANCE AND HEARING PROCEDURE

8.1. Preamble. All faculty and students shall have the right to due process in settling grievances which may arise (CANR Bylaws 7.1.).

8.2. Procedures

8.2.2. Procedure for resolving student grievances are outlined in the University documents *Academic Freedom Report for Students at Michigan State University* and *Graduate Students Rights and Responsibilities*, and in the Bylaws of the Student Senate. A student or students may take complaints relative to instruction directly to the Department Chairperson. If the Chairperson is unable to resolve the matter to the student's satisfaction, the Chairperson shall refer the unresolved complaints in writing to either the Undergraduate Affairs Committee or Graduate Affairs Committee who will conduct a hearing. A hearing shall be scheduled within 2 weeks involving the student(s), the involved faculty or staff member(s), and the Undergraduate/ Graduate Affairs Committee. A written report of the action or recommendations of the Undergraduate/Graduate Affairs Committee will be forwarded to the Dean, Department Chair, the involved faculty or staff member(s), student and university Ombudsman within ten working days of the receipt of the complaint. Students wishing to appeal the Department's action or recommendation may do so as outlined in provisions of the above referenced documents and guidelines for procedures for resolving student grievances.

Graduate Students as Representatives of MSU

Graduate students engaged in professional activities – whether at the University, working with communities, engaged in international travel and work, participating in professional conferences, attending meetings and public hearings, or other relevant scholarly or practitioner activities – are representatives of Michigan State University. Consequently you are expected to behave in a professional manner. Some examples (provided only as examples, not intended to be comprehensive) of appropriate behavior are:

- When attending professional conferences or meetings, especially when funded in whole or part by University funds, you are expected to participate in the conference sessions and events (not act as though the trip is your personal vacation).
- In doing all your work, you should behave with academic and professional integrity. (See Academic and Research Integrity section on page 35.)
- When engaging in scholarly debate, treat others with respect and be an active listener.
- In making professional presentations or writing journal articles, acknowledge and cite all work and ideas of others, as they contribute to your own ideas and work. (Even paraphrased work should be cited.)

• Research Guidelines •

Academic and Research Integrity

Academic integrity is a strong value adhered to by the University, and all students and faculty members are expected to behave and conduct their work with integrity, adhering to general professional ethical standards and University policies and guidelines. Students may be dismissed from the CARRS Graduate Program for violating University academic integrity and research ethics. (GSRR)

As is the rest of the University, CARRS is diligent in its efforts to maintain the highest levels of ethical scholarly practice. Faculty, specialists and students are expected to adhere to the standards and processes of Michigan State University's institutional review board, University Committee and Research Involving Human Subjects (UCRIHS).

You are required to receive UCRIHS approval *PRIOR TO BEGINNING* any data collection. The faculty member identified as principal investigator of your research will work with you to develop and submit the required application. Detailed information regarding UCRIHS and its procedures can be found at (<http://www.humanresearch.msu.edu>).

“Breaches in professional ethics range from questionable research practices to misconduct. . . Integrity in research and creative activities is based not only on sound disciplinary practice, but also on a commitment to basic personal values such as fairness, equity, honesty, and respect. These guidelines are intended to promote high professional standards by everyone – faculty, staff, and students alike.” (MSU, Research Integrity, *Vol. 7 No.2 Spring 2004, pg. 12*) If a student violates academic integrity and research ethics, the circumstances and actions will be reviewed. A decision will be made about whether to terminate the student, place them on probation, or permit them to continue in their program. Depending on the outcome of the review, there exists the possibility of having the case referred to the Dean of Graduate Studies for CANR. (See Grievance Procedures for guidelines, page 34, for disputing a Department decision.)

Expectations related to academic integrity can be found in the following documents.

- **MSU Regulations, Ordinances and Policies Regarding Academic Honesty and Integrity**

(<http://www.msu.edu/unit/ombud/RegsOrdsPolicies.html>).

Topics include: (a) protection of scholarship and grades; (b) examinations; and (c) academic freedom.

- **Graduate Student Rights and Responsibilities** (<http://www.vps.msu.edu/SpLife/gradrights.htm> follow link to download PDF file)

See especially Article 2, which focuses on academic rights and responsibilities for graduate students.

- **Guidelines for Integrity in Research and Creative Activities** (<http://grad.msu.edu/integrity.htm>).

Key principles upon which integrity in academic practices is based include:

- (a) honesty in proposing, performing and reporting research;
- (b) recognition of prior work;
- (c) confidentiality in peer review;
- (d) disclosure of potential conflicts of interest;
- (e) compliance with institutional and sponsor requirements;
- (f) protection of human subjects and humane care of animals in the conduct of research;
- (g) collegiality in scholarly interactions and sharing of resources; and
- (h) adherence to fair and open relationships between senior scholars and their coworkers.

Michigan State University Guidelines on Authorship

Adopted by the University Research Council

January 15, 1998

Available at: <http://www.msu.edu/unit/vprgs/authorshipguidelines.htm>

1. **Authorship** - A person claiming authorship of a scholarly publication must have met the following criteria:
 - a. Substantial participation in conception and design of the study, or in analysis and interpretation of data;
 - b. Substantial participation in the drafting of the manuscript or in the substantive editing of the manuscript;
 - c. Final approval of the version of the manuscript to be published;
 - d. Ability to explain and defend the study in public or scholarly settings.
 - e. (Note: these criteria follow closely those recommended by several professional associations. See especially the International Committee of Medical Journal Editors, *Annals of Internal Medicine* 1988; 108: 258-65.)
2. **Acknowledgment** - Contributions that do not justify authorship should be acknowledged separately in the notes to the manuscript. These may include general supervision of a research group, assistance in obtaining funding, or technical support.
3. **"Honorary Authorship"** - A claim of authorship by, or assignment of authorship to, persons who may have been associated in some way with a study but do not meet the four criteria in item 1 may constitute an unethical research practice.
4. **Graduate Student Authorship** - "Faculty should be especially aware of their responsibility to safeguard the rights of graduate students to publish the results of their research." (MSU Research Handbook, 1985, p. 16, section 4.3.1.)
5. **Senior Author and Order of Authorship** - The senior author is generally defined as the person who leads a study and makes a major contribution to the work. All the authors at the outset of a project should establish senior authorship, preferably in a written memorandum of understanding. This memorandum of understanding should reference the authors' agreement to abide by their departments' policy on authorship or this University default policy on authorship. At the outset of the study the Senior Author should discuss the outline of work and a tentative Order of Authorship with the study participants. As projects proceed, agreements regarding authorship may need to be changed. It is the responsibility of the senior author to assure that the contributions of study participants are properly recognized.
6. **Disputes Over Authorship** - Disagreements over authorship, e.g. who has a right to be an author or the order of authorship, should be resolved by the Senior Author in collegial consultation with the other authors. When this process cannot reach resolution, the Senior Author should arrange with his or her chairperson for arbitration by a knowledgeable and disinterested third party acceptable to all the authors. If the authors cannot agree on a mutually acceptable arbitrator, then the Vice President for Research and Graduate Studies shall appoint an arbitrator. During the arbitration process all the authors are expected to refrain from unilateral actions that may damage the authorship interests and rights of the other authors.
7. **Accountability** - Every author listed on a publication is presumed to have approved the final version of the manuscript. Each author is responsible for the integrity of the research being reported.
8. **Plagiarism** - The word plagiarism is derived from the Latin *plagiarius*, an abductor, and *plagiare*, to steal. The expropriation of another author's text, and the presentation of it as one's own, constitutes plagiarism. Plagiarism, in turn, constitutes misconduct in scholarship under University policies and procedures. Plagiarism in scholarly projects should be reported to one's chairperson, dean, or the University Intellectual Integrity Officer. (American Historical Association, *Statements on Standards*, 1993, p. 13)
9. **Distribution** - This policy should be widely distributed, especially to each new faculty, graduate student and research staff member in academic units.

• Graduate Assistantships •

Graduate Assistantships – Eligibility, Policies, and Contract Guidelines

Assistantships may be granted to CARRS graduate students in good standing (GPA of at least 3.00, full-time status [see page 33]), when funds are available and student skills match the needs of the grant/faculty employer. Students may apply for assistantships both within and outside the CARRS Department. The most common type of assistantship within CARRS are those related to research or outreach grants (very few teaching assistantships have been available in recent years). As such, they are under the control and management of individual faculty and/or staff rather than the Department. Thus, announcements, recruitment, hiring and supervision are done by individual faculty members.

Most assistantships are usually targeted as recruitment and retention tools rather than offered on a competitive basis. However, you can enhance your chances for being hired as a graduate assistant by actively getting to know faculty and their work. Students are encouraged to meet various faculty members, familiarize themselves with the research and outreach interests of faculty, and to let faculty know their strengths related to potential projects/assistantships. Volunteering to work on a project may help faculty understand your strengths (potentially leading to a future assistantship) as well as providing a professional development opportunity for you. (If you volunteer to work on some project, be sure you are familiar with Union guidelines that protect paid assistantship students.) Applicants are assessed based on their professional interests, stated goals, competence in required skill sets. Assistantships are viewed as part of the student's education program. Additionally, students who apply for a teaching assistantship must meet the University's SPEAK requirements (see <http://www.msu.edu/~taprog/info/testing.html> for details).

Basic Policy. At MSU, ITAs who are not native speakers of English are required to demonstrate that they meet a minimum standard of fluency in spoken English before they can be assigned teaching work that involves oral communication with undergraduate students. TAs may meet this requirement by:

- a) getting a score of 50 or higher on the Test of Spoken English (TSE), given by the Educational Testing Service (ETS), or
- b) getting a score of 50 or higher on SPEAK, given by the English Language Center (ELC), or
- c) taking English 097 (the TA Speaking and Listening Class) and getting a score of 50 or higher on the ITA Oral Interview (ITAOI). The ITAOI is given by the ELC.

Terms, conditions and expectations of graduate assistantships are guided by:

- The Graduate School policy on Graduate Assistantships (<http://grad.msu.edu>), and
- the Agreement Michigan State University and the Graduate Employees Union MFT & SRP/AFT/AFL-CIO (<http://www.geuatmsu.org/>)

CARRS is guided in its relationship with employed students by the Graduate Assistantship policies established by the University. Please refer to the Michigan State University and the Graduate Employees Union Contract (<http://grad.msu.edu/geu/agree.pdf>) and the Graduate Student Rights and Responsibilities Article 4 (4.21-4.2.8) (<http://www.vps.msu.edu/SpLife/gradrights.htm> follow link to download PDF file) for details.

Work Terms for Graduate Assistantships

Most assistantships in CARRS are either quarter time (10 hours per week) or half time (20 hours per week).

Note that, if you have an assistantship, you are responsible for working during the entire term of your appointment. (Efforts should be made to not schedule assistants to work on designated University holidays, if possible.)

Fall semester appointments:	August 16 - December 31
Spring semester appointments:	January 1 - May 15
Summer appointments:	May 16 - August 15

Each graduate assistant, when hired, will be provided with a written explanation of task expectations and terms of the assistantship. (The terms can be modified by mutual agreement of the student and supervising faculty or staff member.)

Renewal and termination are based on performance assessments and availability of funds.

If you have been awarded an assistantship or are otherwise employed on campus, contact your supervisor immediately to complete appropriate paperwork, discuss your assignment and schedule, and address any issues related to your employment.

Assistantship Paperwork and Paychecks

You will work with one of the accountants (Jamie Pratt or Barb McNiece) to complete all the appropriate paperwork.

These include (most forms available via <https://ntweb11.ais.msu.edu/Payess/AppEntry.Asp>):

- Graduate Assistant Appointment Form (accessible only by the accountants)
- INS I-9 Form
- Federal W-4 form
- State of Michigan and Local Tax W-4 Forms
- MSU W-2 Wage and Tax Statement
- Payroll W-2 Address Form
- Direct Deposit Form (optional, but strongly recommended)

Students are paid every two weeks.

Paychecks or payroll statements (if using direct deposit) are distributed by Sue Chatterly.

If you have an **assistantship**, you will develop a plan for recording your work hours with your supervising faculty member. If you are an **hourly wage earner**, you will record your hours on the form in your personal folder located in Room 151 Natural Resources Building.

Assistantship Performance Assessment

Your supervisor will provide a written assessment of your work at least once each year (or shorter term, if term of employment is less). Performance will be assessed against the expectations and tasks identified in the Scope of Work, as well as on factors such as timeliness of task completion, quality of work, responsibility in performing tasks, etc. Copies of your performance assessments will be placed in your permanent academic file. Renewal of an assistantship may be contingent on the outcome of your evaluation. If you are hired by your Major Professor, your assistantship performance review can be incorporated within your annual review conducted with your Major Professor (see *Academic Performance and Progress Assessment [Annual Review]* section, page 31, for annual review guidelines).

Paid Work Outside of Assistantship Responsibilities

Students are permitted to work at other paid jobs as long as their doing so does not interfere with their work schedule or quality of work associated with the assistantship. Students on F-1 and J-1 visas are required to be full-time students and may work **ONLY** on-campus, except in rare cases of economic hardship, **OR** in the “training” options listed on the ISP web site (see link below). Their work permission on-campus is limited to 20 hours per week while school is in session, though they may work full-time during vacations (i.e., Winter break, Spring break and Summer vacation.) (See <http://www.isp.msu.edu/oiss> for more information).

Use of Department Resources

Department and University resources (e.g., computers, photocopy machine, paper, office supplies, telephones, other equipment) are to be used only to fulfill the responsibilities of University projects to which the student is assigned. Personal or other business use is prohibited. Department and University graduate student computer labs are available for doing personal and class work.

• Graduate Application and Admissions Process •

Admissions Timeline

Applicants for graduate programs in Community, Agriculture, Recreation and Resource Studies are strongly encouraged to begin their programs during a fall semester. Reasons include: eligibility to be considered for university fellowships; typically a larger cohort of students beginning in the fall (which provides a strong network of peers to work with throughout your graduate program); and offering of the required CARRS foundations courses during the fall semester (ACR 800 and ACR 802). However, students are allowed to begin their coursework in spring or summer semesters.

Foundations Course Requirements:

Students who begin their programs during a semester other than fall are required to enroll for the core courses (ACR 800 and ACR 802 for MS students, and at least ACR 800 for Ph.D. students) during the first fall term of their enrollment in CARRS. Those beginning in the fall term are required to take these core courses during their first fall term.

Application Deadlines

The deadline for applications for admission beginning Summer or Fall 2007 is **March 1, 2007**.

To be competitive for university-level complete applications must be received by **December 1, 2006**.

To enhance opportunities for other types of funding, submission by **December 1, 2006** is recommended.

The deadline for applications for admission beginning Spring 2007 is **October 1, 2006**.

MSU Application

Please obtain a copy of the graduate application form through the university's on-line application page.

Program codes for CARRS graduate programs, to be used on the official MSU application forms, are:

M.S.: 5208

Ph.D.: 5209

When application is complete, send it directly to Michigan State University through the on-line application page.

Additional Application Materials & Instructions

Please submit the following application materials directly to CARRS Graduate Secretary, Diane Davis:

- 1. Copy of MSU application** (If you have a previous and/or current association with MSU, this may be a MSU readmission or transfer form. If you have questions, contact the CARRS Graduate Secretary.)
- 2. Statement of Purpose and Potential Contributions**

Maximum length: 3 pages. Required elements to include in your statement (if you do not address all these items adequately, you will weaken your application):

 - Identify which degree program to which you are applying (MS-Plan A, MS-Plan B, or Ph.D.). Clearly explain WHY you want to earn this degree.
 - Discuss your passions, your career goals and explain why you are interested in pursuing your chosen degree through the CARRS program. In particular, explain why this interdisciplinary program is a good fit with your goals. (This discussion is a particularly important part of your application packet.)
 - Identify and discuss your intended focus area(s) for your degree work. (What do you want to get out of your degree?) Explain the rationale for your selection of this degree/focal area.
 - Describe your background (education, paid and unpaid experiences, skills, avocational interests, etc.) and how it has helped prepare you for your proposed degree work (note that "change of career" is OK as part of the rationale). Be specific when describing your experiences. You should do more than simply list jobs and activities. Explain *what you have learned* and *why it will help you be successful in your degree work*.
 - Explain what you can contribute to the CARRS department, MSU and your fellow students. How do you plan to contribute to your "world," your community, and your peers, both during your academic work and in the future?
 - If you have apparent weaknesses in your application materials, please explain them.

CARRS Graduate Application Process (cont.):

3. GRE test scores; must be no older than 5 years.

MSU General Code is 1465 and the Major Field Code is 2299 (social sciences “other”).

4. TOEFL test scores (required of everyone for whom English is not the first language, even if you have studied and/or lived in an English-speaking country); must be no older than 2 years. Two alternative assessments may be taken in lieu of TOEFL exams, but scores still must be submitted as part of the application packet.

5. “Key Experience” Essay: Write a separate essay (maximum 2 pages) to supplement your Statement of Purpose. For this essay, select some key experience in your life (this can be related to a work experience, a volunteer experience, an educational experience, a family experience, an experience during your youth) that has influenced your thinking and your choice of “life’s work.” Discuss how this experience (perhaps combined with other experiences) has led you to want to pursue graduate work in Community, Agriculture, Recreation and Resource Studies.

6. Letters of Recommendation (three)

Note: We request that references complete the generic Recommendation for Admission Form plus write a separate letter to provide details about 1) the applicant's skills and abilities for pursuing the degree for which they are applying, and 2) about the applicant's "fit" with the CARRS program (not just graduate work in general). Be sure your references receive these instructions.

7. Résumé (2 pages); Include in your résumé:

- Professional experiences (paid and/or unpaid)
- Other relevant experiences (if any)
- Certifications, honors, awards
- Professional organization memberships/involvement
- Publications (if relevant)

8. Transcripts from all universities attended

Indicate if there is a specific individual faculty member with whom you have been communicating, or with whom you are interested in working. Your application will be reviewed even if you have not been recruited actively by a faculty member.

The Graduate Committee will begin reviewing an application packet when a complete set of these materials has been received in the CARRS Department. However, we are not able to officially accept any student until the official MSU application has been received from the MSU Admissions Office and an individual faculty member accepts responsibility for advising a student.

Indicate if there is a specific individual faculty member with whom you have been communicating, or with whom you are interested in working. Your application will be reviewed even if you have not been recruited actively by an individual faculty member.

The Graduate Committee will begin reviewing an application packet when a complete set of these materials has been received in the CARRS Department. However, we are not able to officially accept any student until the official MSU application has been received from the MSU Admissions Office.

If you have questions, please contact either:

Dr. Gail A. Vander Stoep, Associate Professor
Chair, Graduate Affairs and Curriculum Committee
Michigan State University
Dept. of CARRS
131 Natural Resources Building
East Lansing, MI 48824-1222
Phone: 517.432.0266
Fax: 517.432.3597
Email: vandर्स1@msu.edu

Please send your materials directly to:

Diane Davis, Graduate Secretary
Michigan State University
Dept. of CARRS
131 Natural Resources Building
East Lansing, MI 48824-1222
Phone: 517.432.0275
Fax: 517.432.3597
Email: davisdia@msu.edu

• Appendices •

Appendix A: Inter-departmental Specializations and Certifications

Appendix B: Examples of Research Studies and Programs

Appendix C: List of CARRS Graduate Courses

Appendix D: Master of Science-Plan B Courses

Appendix E: Student Resources

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• Appendix A •

Inter-departmental Specializations and Certifications

• Appendix A •

Inter-departmental Specializations and Certifications

Overview

Following is a list of graduate specializations that CARRS students may consider using as part of their graduate program of study. Doctoral students may choose to use a specialization as part of one of their two “focal areas” (remembering that at least one course in each focus area must be a CARRS course [ACR designation] or from one of the three former departments [AEE, PRR, RD]).

The concept of “specializations” and focus areas, as related to the philosophy of the new graduate program development in the Department of Community, Agriculture, Recreation and Resource Studies, mirrors the philosophy presented by the Environmental Science and Policy Program:

In the 21st century, environmental professionals will need both interdisciplinary breadth and disciplinary depth. This is the model that some have called the "T-shaped" graduate student. Disciplinary depth is the pillar of the "T" that provides command of a literature in detail and the meticulous skills required to conduct sound research. Interdisciplinary breadth is the crossbar of the "T", providing language and conceptual frameworks that allow communication across disciplines. Together, these develop professionals who understand the context of their research and can work effectively in multidisciplinary teams. (ESPP)

Current specializations include:

- Doctoral Specialization in Environmental Science and Policy (Ph.D. only)
- Specialization in Environmental and Resource Economics (MS and Ph.D.)
- Certification in the Museum Studies Program (any level)
- Specialization in Environmental Toxicology (MS) & Multidisciplinary Program in Environmental Toxicology (Ph.D.)
- Certification in Watershed Management – Virtual Program (any level)
- Specialization in Gender, Justice and Environmental Change (MS and Ph.D.)

Doctoral Specialization in Environmental Science and Policy (Ph.D. only)

Program:

Doctoral students pursue a Ph.D. in one of MSU's many existing doctoral programs that have an environmental focus (including CARRS). In addition, they complete the four-course coursework for the Specialization in Environmental Science and Policy. The Specialization provides students with an understanding of the diverse disciplines brought to bear on contemporary environmental problems. Each course is designed to provide an understanding of how various disciplines conceptualize environmental issues and how scientific information can be brought to bear on environmental decision-making and environmental policy.

Coursework:

The Doctoral Specialization in Environmental Science and Policy is based on a sequence of four courses. Students are expected to complete the courses in sequence. Students may be allowed to opt out of one course on demonstrating appropriate background.

- **ESP 801** - Physical, Chemical and Biological Processes of the Environment
- **ESP 802** - Human Systems and Environment
- **ESP 803** - Human and Ecological Health Assessment and Management
- **ESP 804** - Environmental Applications and Analysis

Contact Information:

E-mail: espp@msu.edu

Phone: 517.432.8296

Web: <http://www.environment.msu.edu/>

Specialization in Environmental and Resource Economics (MS and Ph.D.)

Description:

MSU offers a degree certification in Environmental and Resource Economics through the interdepartmental Graduate Specialization. The certification requirements are fulfilled while enrolled in the MS or Ph.D. program of one of the six participating departments, including CARRS. A graduate student who completes the requirements may request a formal degree certification in Environmental and Resource Economics.

Coursework:

Required Courses

The minimum course requirements address three areas:

- **Microeconomics:**

- **EC 805:** Microeconomic Analysis
OR
- **EC 812A:** Microeconomics I

- **Environmental and Resource Economics Cognate:**

A student in a Masters degree program takes 3 courses from the following list. A Ph.D. student takes 4 courses from the following list. The listed courses vary greatly in their economic, policy, and natural resources content. Students should be careful to select courses that provide a sufficient level of expertise relative to their career goals.

- **AEC 810:** Institutional and Behavioral Economics
- **AEC 829:** The Economics of Environmental Resources
- **FOR 866:** Economics of Renewable Resources
- **PRR 840:** Recreation and Tourism Economics
- **RD 823:** Community-Based Natural Resource Management
- **AEC 923:** Advanced Environmental and Resource Economics
- **AEC 925:** Environmental and Resource Economics Research

Additional Electives

Courses offered by the participating departments are reviewed biannually for inclusion in the list of cognate electives. Courses may be added to the list when they contain substantial resource economics content.

- **Empirical Methods Cognate**

A MS student takes 6 credits and a Ph.D. student takes 9 credits to satisfy the requirement in empirical methods (this may satisfy the requirements of the CARRS MS or PhD program). The objective is for students to gain a working knowledge of the techniques and methods of empirical analysis. Courses selected to satisfy this requirement should give a student exposure to research design, survey and experimental methods, statistics, econometrics, benefit cost analysis, mathematical programming, input-output analysis, or systems analysis.

NOTE: Ph.D. students are required to pass a qualifying examination in Environmental and Resource Economics.

Contact Information:

Contact any of the CARRS faculty serving as core ERE faculty: Don Holecek, Michael Kaplowitz, John Kerr, Paul Nickel, or Patricia Norris (see CARRS web site for contact information) or visit the ERE web site.

Web: <http://www.msu.edu/user/gradschl/ere/erespecial.htm>

Certification in the Museum Studies Program (any level)

Program:

Any student currently taking classes at Michigan State University may pursue the Museum Studies Program specialization. There is no formal application procedure. Once you enroll in a museum studies course, you are entered into the Museum Studies Program listserv and program database. To earn the specialization, you must complete a Program Completion Form at least one semester before you graduate.

Coursework:

The graduate certification in the Museum Studies Program is a 15-credit program. The student must complete the following:

a. Both of the following courses:

- AL 485 Introduction to Museum Studies (also HA 485 or ANP 485)
- AL 496 Museum Internship (was HA 493c)

b. At least three of the following courses:

- AL 498** Learning in Museums (was HA 487, also HA 487 or PRR 498)
- AL 488** Curatorial Methods and Practices (also HA 488 or ANP 488)
- AL 492** Special Topics in Museum Studies (also HA 492 or ANP 492)
- AL 494** Museum Exhibitions: Theory and Development (also HA 494)
- PRR 451** Park Interpretation and Visitor Information Services
- AL 895** Special Topics in Museum Studies (also ANP 895)

Certification:

Upon completion of the requirements, the student must contact the Director of the Museum Studies Program and request certification of completion. After the certification is approved, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This information will appear on the student's transcript.

Contact Information:

Museum

Dr. Kristine Morrissey, Director, MSP
MSU Museum
Michigan State University
East Lansing, MI 48824-1119, USA
E-mail: morriss8@msu.edu
Phone: 517.353.1943
Web: <http://www.iwr.msu.edu/vu/watershed.html>

CARRS Department

Dr. Gail A. Vander Stoep, Asso. Prof.
CARRS Department
Michigan State University
131 Natural Resources Building
East Lansing, MI 48824-1222, USA
E-mail: vanders1@msu.edu
Phone: 517.432.0366
Fax: 517.432.3597

Specialization in Environmental Toxicology (MS)

Multidisciplinary Program in Environmental Toxicology (Ph.D.)

Program:

The program prepares students for a career addressing the complex problems associated with environmental contamination. Students will be able to interact with the multidisciplinary teams that are needed to solve current and prevent future environmental problems. The multidisciplinary approach provides great flexibility in selecting areas for study. Faculty advisors will help you plan a course of study tailored to your interests, capabilities and professional goals. You will gain research expertise in a departmentally-based discipline of your choice as well as acquire a broad base of knowledge in environmental toxicology.

In addition, students acquire a broad base of knowledge in environmental toxicology through an interactive program of courses, seminars, workshops and scientific meetings. This training prepares the students to interact with the multidisciplinary teams that are needed to solve current and prevent future environmental problems.

Environmental Toxicology Coursework – MS Specialization:

To earn the specialization, students must meet the requirements of their disciplinary departments and those of the IET Multidisciplinary Masters Specialization. Where course requirements overlap, approval of the student's department and college is needed for using a given course to satisfy the specialization as well as the departmental requirements.

The Multidisciplinary Masters Specialization Program requirements include:

1. Attendance at a minimum of six environmental toxicology seminars;
2. Completion of the courses used to satisfy the specialization requirements, with a grade point average of at least 3.0;
3. Completion of the following courses:
RD 836 Law of Environmental Regulation (3 credits, Fall);

ZOL 814 Environmental Chemodynamics (4 credits, Spring, even years)

OR

ANS 827 Integrated Risk Assessment of Environmental Hazards (3 credits, Spring, odd years);

PHM 450 Introduction to Chemical Toxicology (3 credits, Spring)

OR

PHM 814 Advanced Principles of Toxicology (3 credits, Spring, even years);

Plus one course from the *Elective Course List* (see ET web site)

Environmental Toxicology Coursework – Ph.D. Program:

To earn the joint Ph.D. degree, students shall meet the requirements of their disciplinary departments and those of the Multidisciplinary Program in Environmental Toxicology. Where course requirements overlap, a given course may be counted toward both the disciplinary department and Environmental Toxicology Program requirements

Environmental Toxicology Program requirements include:

1. Completion of a Ph.D. thesis/dissertation, the topic of which must be in the broad area of environmental toxicology;
2. Attendance at a minimum of twelve seminars approved by the Institute for Environmental Toxicology (see ET web site);
3. Completion (with a grade point average of at least 3.0) of the course requirements for either the toxicology or environmental track.

Toxicology Track:

PHM 814 Advanced Principles of Toxicology (3 credits, Spring, even years);

PHM 980 Problems-Biostatistics (2 credits);

PTH 856 Concepts in Toxicologic Pathology (2 credits, Summer, odd years)

OR

PTH 851 Advanced General Pathology (3 credits, Fall, even years);

ZOL 814 Environmental Chemodynamics (4 credits, Spring, even years)

OR

ANS 827 Integrated Risk Assessment of Environmental Hazards (3 credits, Spring, odd years);

Plus one course from the “Plus One Course” list in any interest group from the Elective Courses List

Environmental Track:

ZOL 814 Environmental Chemodynamics (4 credits, Spring, even years)

OR

ANS 827 Integrated Risk Assessment of Environmental Hazards (3 credits, Spring, odd years)

PHM 450 Introduction to Chemical Toxicology (3 credits, Spring)

OR

PHM 814 Advanced Principles of Toxicology (3 credits, Spring, even years);

Plus one course from the “Plus Three Courses” list from the Elective Courses List in at least two interest groups; i.e., one course from each of three different interest groups or one course from one group and two courses from another group.

For Further Information:

Contact your advisor or see the web site:

http://www.iet.msu.edu/grad_progs/gradprog.htm

Certification in Watershed Management – Virtual Program (any level)

Description:

Watershed management necessitates an interdisciplinary approach to problem solving, with law, policy, community development and resource economics issues contributing as much to solutions as engineering, biology, hydrology and chemistry. An effective watershed manager must understand the science behind water resources management and have skills in public relations, policy-making, and program evaluation.

This program is offered through a series of Internet-based courses leading to undergraduate credit, graduate credit or a professional certificate. **Those individuals who complete all four courses (3 credits each) will receive a Professional Certificate in Watershed Management.** Courses need not be taken in any particular order; however, concepts do build upon each other from one module to the next. Whether you are a professional or a student, this program is an opportunity for you to update your skills to meet the challenges of resource management under the watershed approach framework.

Coursework:

To receive certification, students must complete all four modules (courses):

RD 452 (h20shed1) Watershed Concepts	(3 credits)
RD 881 Sect. 730 (h20shed2) Building and Implementing Watershed Management Plans	(3 credits)
RD 882 (h20shed3) Watershed Assessments and Tools	(3 credits)
RD 891 (h20shed4) Legal, Financial and Institutional Frameworks for Watershed Management	(3 credits)

Contact Information:

Dr. Jon Bartholic, Professor
Institute of Water Research
115 Manly Miles Building
1405 S. Harrison Road
Michigan State University
East Lansing, MI 48823-5243, USA
E-mail: bartholi@msu.edu
Phone: 517.353.3742 or 517.353.9785
Fax: 517.353.1812
Web: <http://www.iwr.msu.edu/vu/watershed.html>

Specialization in Gender, Justice and Environmental Change (MS and Ph.D.)

Description:

Researchers, policy-makers, and activists have increasingly recognized the critical importance of these interlocking dimensions for understanding the social relations underlying many environmental problems, from Love Canal in New York to the Green Belt Movement in Kenya. Examples of emerging scholarship in this field include how gender, class, race, and ethnicity intersect in:

- the environmental politics of international issues such as biotechnology and globalization
- grassroots environmental justice movements use and management of natural resources
- feminist environmental economics human-environment relations in history and in literature

This specialization is sponsored jointly by the College of Agriculture and Natural Resources and the College of Social Science. This program, first offered in Fall 2000, is the first of its kind in the nation explicitly focusing on the intersection of gender, environmental change, and social and environmental justice. The program is designed in particular to examine these issues and processes from both local and global perspectives, challenging traditional dichotomies between the First and Third World, the North and the South.

Coursework:

The specialization is flexible and multidisciplinary, designed in consultation with the GJEC Coordinator. The student must meet the following requirements, totaling 12 credits:

1. Complete the following two core courses* (6 credits, offered in alternate years):

ANP/FW/FOR/GEO/RD/SOC 858	GJEC: Issues and Concepts	(3 credits)
ANP/FW/FOR/GEO/RD/SOC 859	GJEC: Methodology and Application	(3 credits)
2. Complete one policy course relevant to the specialization (3 credits)
3. Complete one elective course relevant to the specialization (3 credits)

Contact Information:

Gender, Justice and Environmental Change
c/o Women and International Development (WID)
206 International Center
Michigan State University
East Lansing, MI 48824
E-mail: gendenvr@msu.edu
Phone: 517.353.5040
Fax: 517.432.4845
Web: <http://www.msu.edu/~gendenvr>

• Appendix B •

Examples of Research Studies and Programs

Economic Impacts of Recreation and Tourism

Description:

Recreation and Tourism Activities have significant impacts on regional economies. This list summarizes economic impact concepts and methods, focusing particularly on their applications to recreation and tourism. Bulletins, training materials, analytical tools, research results, and economic impact reports that we have produced over the past ten years are made available here. We also maintain a bibliography of economic impact studies/references and links to some of the best sites on the web for students, researchers, and analysts interested in the economic impacts of recreation and tourism.

Helpful Links

Go to the web site for links to helpful information: <http://www.prr.msu.edu/mgm2/econ/>

Key Research Program Sponsors

Michigan Agricultural Experiment Station, U.S. Army Corps of Engineers, Waterways Experiment Station (CEWES), US Department of Agriculture, Forest Service, Inventory and Monitoring Institute, Cooperative State Research, Education, and Extension Service, Travel Michigan, Michigan Department of Natural Resources, National Park Service

Contact Information for the MSU Research Team:

Dr. Daniel Stynes, Professor Emeritus, CARRS

131 Natural Resources Building

Michigan State University

East Lansing, MI 48824, USA

E-mail: stynes@msu.edu

Phone: 517.353.9881

Fax: 517.432.3597

Dr. Dennis Propst, Professor, Forestry

115 Natural Resources Building

Michigan State University

East Lansing, MI 48824, USA

E-mail: propst@msu.edu

Phone: 517.355.8239

Fax: 517.432.1143

Non-market Values & Freshwater Wetlands Research

Description:

The Non-market Values & Freshwater Wetlands research program develops and tests methods for valuing wetland ecosystem services. Previous research shows that nonuse services, including habitat services, are associated with wetland ecosystems. The value of such services may be measured using non-market methods, and these non-market values may be economically significant relative to other wetland values. However, previous ecosystem valuation has been criticized for placing too much emphasis on the question of "what *is* the value" and not enough emphasis on "*what* it is that people value". The objective of the research is to design and implement stated preference studies to obtain the data necessary to disaggregate wetland values into the value of wetland non-market services.

Contact Information:

Wetlands Economics Program

323 Natural Resources Building

Michigan State University

East Lansing, MI 48824, USA

Phone: 517.355.0101

Fax: 517.353.8994

Web: wetland@rd.msu.edu

Program Evaluation Institute for Agriculture, Environmental, and Natural Resource Professionals

Description:

This two-week intensive summer institute addresses unique aspects and challenges of program evaluation facing agriculture and natural resource scientists. During the institute, participants review various program evaluation theories and develop an evaluation plan within the context of their individual projects that include instrument development, data analysis, and report writing.

The institute helps you develop an enhanced evaluation capacity to present the outcomes and impact of your educational programs or projects.

Topics Cover Four Broad Areas:

- Creating a program evaluation plan to assess your project's outcomes and impact.
- Reviewing best practices in program evaluation across various disciplines.
- Incorporating best practices and cutting-edge frameworks to develop a comprehensive program evaluation plan.
- Implementing a program evaluation plan using best practices for agriculture and natural resource projects.

During this program, you will learn:

- How to plan evaluation of your program or project.
- How to develop grant proposals with a built-in evaluation plan.
- Best practice for advancing program evaluation for approaches to assessing program impact.
- How to develop research methods and instruments.
- Indicators in Program Evaluation that advance program evaluation.
- How to adapt existing models to meet your program evaluation needs.
- How to select sample for evaluation data collection.
- How to analyze and interpret evaluation data using SPSS/PC software.
- How to communicate evaluation findings to stakeholders.

You will learn the cutting-edge techniques and latest frameworks for effective program evaluation.

Contact Information:

Dr. Murari Suvedi, Associate Professor, CARRS
135 Natural Resources Building
Michigan State University
East Lansing, MI 48824, USA
E-mail: suvedi@msu.edu
Phone: 517.432.0265
Fax: 517.432.3597

• **Appendix C** •

List of CARRS Graduate Courses

• Appendix C •

List of CARRS Graduate Courses

Following is a list of graduate courses currently taught by CARRS faculty, or courses that are jointly administered with other departments. The courses are listed in alphabetical order by a code (ACR, AEE, PRTR, RD) assigned by the university Registrar's Office.

ACR is the code for CARRS.

All the other codes (AEE, PRR, RD) reflect the course codes of the departments that now comprise CARRS. The university has a defined process for changing these codes to ACR and this process is underway.

University 400-level undergraduate courses may also be used in a graduate program. Graduate students are advised to discuss this option with their advisor and/or committee. Also see Guidelines for use of 400-level courses in this handbook (pages 11 and 21).

ACR Courses (Community, Agriculture, Recreation and Resource Studies)

AEE Courses (Agriculture and Extension Education)

PRR Courses (Park, Recreation and Tourism Resources)

RD Courses (Resource Development)

For details about the following courses (e.g., number of credits, cross-listings, semester offered), see the listings on the MSU course list web page (or on the list on the CARRS web site: <http://www.carrs.msu.edu>)

ACR Courses

ACR 800 Foundations of Community, Agriculture, Recreation and Resource Studies
ACR 802 Survey of Research Methods
ACR 895 Case Studies in Community, Agriculture, Recreation and Resource Studies
ACR 891 Special Topics in CARRS (often pilot courses)
ACR 898 Master's Professional Project
ACR 899 Master's Thesis Research
ACR 999 Doctoral Dissertation Research

AEE Courses

AEE 802 Educational Leadership in Agriculture and Natural Resources
AEE 803 Instructional Strategies in Agriculture and Natural Resources
AEE 806 Program Planning and Evaluation in Agriculture and Natural Resources
AEE 822 Experiential Education in Agriculture and Natural Resources
AEE 875 International Studies in Agricultural and Extension Education

AEE 884 Outreach in Fisheries, Wildlife and Natural Resources Management
AEE 890 Independent Study in Agricultural and Extension Education
AEE 891 Selected Topics in Agricultural and Extension Education
AEE 893 Professional Field Experience in Agricultural and Extension Education
AEE 898 Master's Applied Project
AEE 899 Master's Thesis Research
AEE 901 International Development Education in Agriculture and Natural Resources
AEE 990 Advanced Independent Study in Agricultural and Extension Education
AEE 991 Advanced Selected Topics in Agricultural and Extension Education
AEE 993 Advanced Professional Field Experience in Agricultural and Extension Education
AEE 999 Doctoral Dissertation Research

PRR Courses

PRR 815	Park and Recreation Program Services
PRR 816	Environmental Design Theory
PRR 817	Environmental Design Studio
PRR 829	The Economics of Environmental Resources
PRR 840	Recreation and Tourism Economics
PRR 841	Park and Recreation Administration and Policy
PRR 842	Parks and Protected Areas Policy and Management
PRR 844	Research Methods in Recreation, Parks, and Tourism
PRR 870	Park, Recreation and Natural Resources Marketing
PRR 874	Leisure, Travel and Tourism
PRR 883	Environmental Design Seminar
PRR 885	Leadership in Natural Resources and Environmental Management
PRR 890	Independent Study
PRR 891	Selected Topics
PRR 892	Park and Recreation Resources Seminar
PRR 895	Coastal and Maritime Heritage and Management
PRR 898	Master's Project
PRR 899	Master's Thesis Research
PRR 923	Advanced Environmental and Resource Economics
PRR 925	Advanced Natural Resource Economics
PRR 999	Doctoral Dissertation Research

RD Courses

RD 810	Institutional and Behavioral Economics
RD 812	Qualitative Research Techniques for Resource Development
RD 823	Community-Based Natural Resource Management in Developing Countries
RD 825	Planning for Sustainable Development
RD 826	International Development and Sustainability
RD 829	The Economics of Environmental Resources
RD 830	Wetlands Law and Policy
RD 831	Role of the Expert Witness
RD 836	Law of Environmental Regulation
RD 838	Land Use Law
RD 852	Systems Modeling and Simulation
RD 853	Applied Systems Modeling and Simulation for Natural Resource Management
RD 858	Gender, Justice and Environmental Change: Issues and Concepts
RD 859	Gender, Justice, and Environmental Change: Methods and Application
RD 866	Economics of Renewable Resources
RD 869	Community and Conservation
RD 870	Community Resource Development
RD 876	International Rural Community Development (Web-based course)
RD 881	Building and Implementing Watershed Management Plans
RD 882	Watershed Assessments and Tools
RD 890	Independent Study
RD 891	Selected Topics
RD 891-Section 731:	Legal Financial and Institutional Arrangements
RD 898	Master's Research
RD 899	Master's Thesis Research
RD 923	Advanced Environmental and Resource Economics
RD 925	Advanced Natural Resource Economics
RD 999	Doctoral Dissertation Research

• **Appendix D** •

Master of Science – Plan B Courses

• Appendix D •

Master of Science – Plan B Courses

ACR 895, Case Studies course (required for Plan B students, but available as an elective for Plan A students), is designed as a capstone experience, to be taken near the end of a student's academic career after most other coursework has been completed. The intent is to bring together students from across the entire department (from all concentrations, as in the department foundations course) to apply, in an interdisciplinary way, what they've learned throughout their MS experience. Complex cases (e.g., community development cases, land/water use and management cases, program/service provision challenges) will be presented to student teams (composed of members from multiple concentrations) that will develop approaches and recommendations for addressing the issues.

ACR 898, Professional Development course, provides students an opportunity to develop an independent professional or project-based experience appropriate to their individual academic and career goals, and is to be developed in a purposeful manner. Students will work with their chair and committee members (3 persons, including chair) to develop a written proposal for a set of experiences that hone specific practical skills/experiences. The finished proposal is presented in a public forum. The proposed set of experiences may include: a relevant experiential project, an independent project (potentially field- or community-based), and a relevant course in combination with a project, a relevant international experience, or some other structure). The student's proposal shall include the student's learning objectives as well as a description of the project/experience and a justification that is consistent with the student's professional goals and associated degree program. It is important that the proposed activity reflect the stated learning objectives and the course program plan/concentration.

• Appendix E •

Student Resources

• Appendix E •

Following is a list of web sites that graduate students may find useful as they pursue their graduate education:

Academic Programs <http://www.reg.msu.edu/UCC/AcademicPrograms.asp>

Spartan Life <http://www.vps.msu.edu/SpLife/index.htm>

Academic Freedom for Students <http://www.vps.msu.edu/SpLife/acfree.htm>

Graduate Student Rights & Responsibilities <http://www.vps.msu.edu/SpLife/gradrights.htm>
(follow link to download PDF file)

Office for International Students and Scholars <http://www.isp.msu.edu/OISS/>

Code of Teaching Responsibility
<http://www.hr.msu.edu/HRsite/Documents/Faculty/Handbooks/Faculty/Instruction/v-codeofteaching.htm>

GEU/MSU Graduate Contract: <http://grad.msu.edu/geu/agree.pdf>

The Graduate School: <http://www.grad.msu.edu/>

Resources found on this site include:

MSU Application Information

- * Application and Program Information
- * Research Centers and Groups

General Information

- * Thesis/Dissertation Requirements
- * Graduation/Commencement
- * Progress Reports
- * Teaching Assistant Program

Career and Professional Development Information

- * Career and Professional Development Series
- * Career Resources - Science's NextWave
- * Conflict Resolution
- * Responsible Conduct of Research

Hints for Improving Your Graduate Program

- * Graduate Handbook Template
- * Graduate Post

Research and Mentoring Information

- * Guidelines for Graduate Student Advising and Mentoring Relationships
- * Guidelines for Integrity in Research and Creative Activities

General Resources

- * GEU/MSU Contract
- * TA Employing Units
- * University Forms

• Appendix F •

**Sample Titles of
Masters Theses and Projects
and
Doctoral Dissertations**

• Appendix F •

Examples of Masters Theses and Projects, and Doctoral Dissertations

The CARRS Department was created in 2004 by blending and re-focusing three former departments. As of August 2006, no graduate students have yet completed CARRS degrees. Therefore, the sample theses, projects and dissertations listed were completed by students from the three former departments.

Theses/Projects for the Degree of Master of Science

Department of Agricultural and Extension Education (AEE)

Developing and Implementing a Manual to Strengthen Equine Knowledge and Increase Participation in Youth Horse Judging Contests

Cesal, Tracey M., 2004

Cross-Cultural Character Development

Lowery, Takia, 2004

How Farmers Process Risk Using the BSE Issue in Canada

McMullen, Michelle, 2004

An Examination of the Regional Advisory Councils of the National Agricultural Research Institute (INIA) of Uruguay: A Case Study of "INIA La Estanzuela" Research Station

Galup, Ernesto Restaino, 2003

Aligning the FFA Environmental Skills Contest and the Michigan Envirothon Competition and Developing Curriculum to Fit Both

Matchett, Brian, 2003

Performance of Agricultural Extension Services in Mexico: Case Study in Nayarit State

Franco, Elizabeth Landa, 2002

An Investigation of the Relationship Between Interaction and Dropping Out In Distance Education Programs

Gwekwerere, Bernard, 2002

The Process of Building Performance Evaluation Tools for Use with a Customer Service Team

Marshall, Tricia Lynn, 2002

A Guide for the Kenyan Educator: Adult as the Learner

Okello, Ruth M., 2002

Department of Park, Recreation, and Tourism Resources (PRTR)

Exploring the Role and Importance of Historical Authenticity in Heritage Tourism Development: A Case Study Analysis of Manistee and Ludington, Michigan

Craig Wiles, 2005

Internet Uses for Travel Information Search and Travel Product Purchase in Pre-trip Contexts

Jun, Soo Hyun, 2004

Recreation Specialization: Management Preferences & Behaviors of Upper Manistee River Shoreline Owner Anglers
Valentine, Brian Robert, 2003

Home Ownership and Fire in the Wildland-Urban Interface: A Study of Permanent and Seasonal Homeowners
Stanley J. Cindrity, 2002

The Change in Exercise Intervention and Determinant Adherence Research over Time
Dietz, Stephanie Ann, 2000

Department of Resource Development (RD)

Wetland Mitigation Banking: A Banker's Perspective
Bailey, Deborah, 2005

International Developmentalism and an Interpretation of Chaos and Quantum Theories: An Epistemic Inquiry
Egger, Christine, 2005

Outcomes of a Nutrition and Gardening Education Program
Townsend, Charissa, 2005

By-Products from Research: Managing Edible Food
Baldwin, Sherill L., 2004

Active Environmentalism and Views of the World
Suffron, Heather K., 2003

Assessing Agricultural Development Interventions in the Western Highlands of Guatemala: A Farmer Centered Approach
Van Tongeren, Paul L., 2003

A State-wide Assessment of Water Clarity Trends in Michigan Lakes: 1974-2001
Bruhn, Laura Christine, 2002

Managing the Commons: An Analysis of Institutional Arrangements Influencing the Co-Management of Tropical Small-Scale Fisheries
Hovis, Gerald Thomas, 2002

Mercury Emissions from Coal-Fired Power Plants: An Evaluation of Reduction Strategies Using the Analytic Hierarchy Process
Metty, Julie C., 2001

Lessons for Trading Program Design to Protect Water Quality: A Synectic Analysis of Air and Water Quality Protection Programs
Brown, Elaine Marie, 2000

Understanding an Individual's Perceived Risk of Abandoned Mine Lands and an Individual's Willingness to Support Risk Reduction
Stump, Connie Lynn, 2000

Dissertations for the Doctor of Philosophy Degree

Department of Agricultural and Extension Education (AEE)

An Evaluation of the Community Forestry Program in Kaski District of Nepal: A Local Perspective

Pokharel, Ridish K., 2003

Faculty Use of Service-Learning within the College of Agriculture and Natural Resources at Michigan State University

Price, Julianne, 2003

The Status on Rural Women Farm-Household Systems. A Case Study in Ngie Clan in the Northwest Province of Cameroon

Agheneza, Zipporah Engow, 2002

Learner Interactivity in Higher Education: Comparing Face-to-Face, Hybrid and Online Instruction

Brannan, Timothy Alan, 2002

Perceptions of County Extension Directors and Extension Agents on Marketing Michigan State University Extension

Hudson, Hal Curtis, 2002

Perceptions of Area of Expertise Teams: A Study for Michigan State University Extension

Booth, Cheryl N., 2001

Defining Professionalism for Dietetic Education

Golzynski, Diane L., 2001

A Study of Selected Women Administrators and Their Perceptions of the Challenges Encountered in Achieving High Level Positions in Higher Education Administration

Ononiwu, Sister Innocentia Marie, 2001

Recruiting and Retaining Minority 4-H Volunteers in Tampa Bay Area, Florida

Smith, Diana Lanier, 2000

Department of Park, Recreation, and Tourism Resources (PRTR)

An Input-Output Model with Varying Job and Income Ratios for Service Industries: An Application of the Analysis of Leisure Experience and Subjective Wellbeing

Rodriguez, Ariel, 2005

“Doubling Tourist Arrivals Plan” in Taiwan

Sun, Ya-Yen, 2005

An Investigation of the Relationships Between External Environment, Mission and Strategy, Leadership, Organizational Culture, and Performance

Pratt, Zachary L., 2004

Constraints and Constraint Negotiation by Women Sea Kayakers Participating in a Women-Only Course

Dominguez, Lynn Ann, 2003

Examining the Influence of Loyalty Reward Program Membership on the Behavior of Casino Patrons

Palmer, Robert, 2003

Inclusive Recreation Services The Preferences of Consumers and Caregivers: A Comparison Study

Shilling, Mary Lou, 2003

Training in the Michigan Lodging Industry: Role of the Human Capital and Segmented Labor Market Theories
Janes, Patricia Louise (Click), 2000

Power through Tourism: A Blessing on Mahsuri's Eighth Generation in Langkawi?
Kayat, Kalsom, 2000

Factors Influencing Snowmobilers' Aberrant Behaviors: A Comparison of 1996-97 Convicted Snowmobile Law Violators and Other Snowmobilers
Lynch, Joel Anthony, 2000

Department of Resource Development (RD)

Zapotec Use of E-Commerce: The Portrait of Tetitlan Del Valle, Mexico
Rivers, Deanna, 2005

A Systems Approach To Risk Assessment and Disaster Recovery: The Montserrat Case
Rozdilsky, Jack Lewis, 2005

Public Disclosure of Corporate Environmental Performance Impact on Consumer Behavior and Corporate Pollution Reduction in Korea
Moon, Jongyeul, 2002

Understanding the Social Practices that Sustain a Biracial Congregation
Jonranko, Daniel Edwin, 2002

Psychological Determinants of the Intention to Support Watershed Best Management Practice
Pennington Stephen R., 2002

Smallholder Land Interests, Political Opportunities, and Farmer Organization: A Case Study of the Zimbabwe Farmers' Union
Arnaiz, Mario, 2001

Systemic Risk Assessment for Watershed: As Applied to E Coli in the Red Cedar Watershed Michigan
Lang, Michael Jerome, 2001

An Approach for Characterizing the Biogeochemical Fingerprints of Land Use in Surface Waters: Grand Traverse Bay Watershed, Michigan
Wayland Karen G., 2001

Toxic Substances and Federal Water Policy: Application of Kingdon's Model of Agenda Change to the Great Lakes Water Quality Agreement of 1972
MacDonagh, Dumler, Jon, 2000

Governing Waters: The Development of Water Pollution Policy in the United States, 1850-1980
Paavola, Jonni Jyhani, 2000