DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT
BALL STATE UNIVERSITY

GRADUATE ADMISSION POLICY
ADVISING/REGISTRATION AND CURRICULA

Graduate Program Description

Students pursuing a Graduate Degree in Natural Resources and Environmental Management can develop customized programs based on their educational and employment objectives. Our students have obtained careers in a wide variety of governmental and private sector positions that require training in resource management and environmental science.

Graduate students can choose between a Master of Science (M.S.) or Master of Arts (M.A.) degree in Natural Resources and Environmental Management. A doctoral program leading to the Ed.D. in Science of Science Education is also available. Consult the Graduate Catalog concerning doctoral program requirements.

Candidates for the M.A. and M.S. degrees have slightly different programs requirements. Students enrolling in the M.A. degree program complete a Research Paper/Creative Project (RES 697) and supporting course work as determined by the graduate advisor whereas M.S. degree students take Thesis (THES 698) for 6 hours and supporting course work as determined by the thesis committee. Both programs require a minimum of 33 credit hours of course work, including Graduate Research Methodology (NREM 608) and Seminar (NREM 609).

Students entering the Ed.D. program enroll in science courses related to NREM and in education, plus one or more cognate fields of study. The Ed.D. programs each require 90 credit hours of coursework, including a research dissertation above the bachelor's degree. Applicants should refer to the current Graduate School catalog for detailed requirements.

Graduate Admission Policy

Admission to the Master's Degree program in Natural Resources and Environmental Management is based on a combination of undergraduate grade point average, Graduate Record Examination scores, and completed recommendation forms. U.S. citizens should apply at least two months prior to the start of the beginning semester in order to allow time for all application materials to be submitted and processed.

The university's Center for International Programs is the starting point for students who are not U.S. citizens. They can be contacted by mail (SC 102, Ball State University, Muncie IN 47306, U.S.A.) or on the web (http://www.bsu.edu/international) to obtain their application packet. Students whose native language is not English but who score a minimum of 550 on the PBT or 213 on the CBT in the Test of English as a Foreign Language (TOEFL) have no additional language requirements. Those students scoring below 550 or 213 on the CBT may retake the exam or enroll in special writing, speaking and listening courses offered by the English Department.

The application is a two step process:

1. The applicant applies to the Graduate School for admission and submits official transcripts (one for the Graduate School and one for the department). On-line application forms for the Graduate School are available at: http://www.bsu.edu/gradschool/. A 2.75 (on 4.0 scale) GPA is required for regular admission (or 3.0 for last half of undergraduate course work). An appeal process with directed probationary study may be available for those not meeting minimum admission standards. Upon successful completion of the directed study, regular admission is granted.

2. The applicant also applies to the department by submitting the departmental admission application packet. Additionally, each student must arrange for at least two recommendation forms to be submitted by evaluators. Admission to both the Graduate School and the Department of Natural Resources and Environmental Management is required.

3. If you are interested in a teaching or research assistantship, we request GRE scores with your application.

4. If you are accepted by the Graduate School and the department, and want to be considered for a graduate assistantship, indicate this interest to the graduate advisor. For other types of support you may write the Office of Scholarships and Financial Aid for information (Lucina Hall, Room 245, Ball State University, Muncie, IN 47306) or visit their web site: http://www.bsu.edu/gradschool/financialaid/

Departmental Policy and Procedure

All new M.S. and M.A. students must consult with the Department of Natural Resources and Environmental Management graduate advisor, Dr. Amy Gregg, before registering for courses. Students will make a degree choice (M.S. versus M.A.) soon after being admitted. For those students selecting the M.A. program, the departmental graduate advisor will continue to advise the students on courses and general requirements for the degree. For students selecting the M.S. degree program, a graduate committee (minimum of three faculty members, at least two from the Department of Natural Resources and Environmental Management) will be selected by the student with the approval of the departmental graduate advisor. The thesis advisor (a member of the graduate faculty) will serve as chair of the graduate committee. This committee, with advice from the departmental graduate advisor, will approve a course of study and the thesis topic.

After admission by the Graduate School and the Department of Natural Resources and Environmental Management, the following steps are recommended for students pursuing the M.A. or M.S.:

1. Contact Department Graduate Advisor, Dr. Amy Gregg, before beginning a graduate program. Graduate Advisor approval of courses is required prior to registration each semester.
2. Decide upon the M.A. or M.S. degree. This decision may be changed at a later date.

3. During the last semester a student registers for credits to be included in the M.A. or M.S. program, an application for graduation must be filed at the Graduate Office (ideally early in the semester of expected graduation).

Master of Arts

(33 credit hrs.)

1. Research Paper Plan – Complete NREM 608 & 609 plus:

    a. A written outline defining the problem to be studied and the method of researching the problem must be submitted to and approved by a faculty advisor and the department chairperson before enrolling for Research Paper, RES697 (3 credits).

    b. Data and/or materials compiled for the research paper should be organized and explained by the use of tables, graphs, maps, statistics, photographs, etc.

    c. Library, field work, interviews, and laboratory analyses are acceptable sources for obtaining data.

    d. The format of the final paper shall include: definition of problem, review of literature, method, results and discussion, summary and conclusions, and bibliography.

    e. The research paper will be presented in NREM 609 (Seminar)

2. Creative Project Plan – Complete NREM 608 & 609 plus:

    a. Complete a creative project CRPR 698 (3 credits) under the supervision of a faculty advisor. A written outline explaining the project must be submitted to and approved by a faculty advisor and the department chairperson before the student enrolls in RES 697.

    b. The creative project may include a literary composition, instructional unit in natural resources education, an educational or interpretive display, or other original work approved by the faculty advisor.

    c. The project must be accompanied by a written report that includes a description of the project, the value and use of the project, and a literature review. This will be filed in the Department of Natural Resources and Environmental Management office.

    d. The product of the creative project shall also be provided to the Department of Natural Resources and Environmental Management office (where appropriate).

    e. The creative project will normally be the basis for an exit seminar presentation.

Master of Science
(33 credit hrs.)

1. Thesis Plan

    a. The student will complete NREM 608 – Research Methodologies in Natural Resources and Environmental Studies early in their program. This course should be taken during the first semester in the graduate program (usually Fall semester), as it provides the introduction to conducting successful graduate research.

    b. All M.S. candidates must have their graduate committee's approval of their thesis topic and the approval of the Department Graduate Advisor before registering for THES 698.

    c. The proposal submitted to the student's graduate committee should include the following: statement of problem, literature review, and methods and a one-page abstract for submission to the Graduate School. The student will formally present the proposal before the thesis committee and any other interested faculty.

    d. The thesis will address empirical data that will be statistically analyzed. However, under some circumstances descriptive or historical research may be used to collect material for the thesis. A thesis may be written with an embedded paper that can be submitted to a scientific journal. Details are available from the Department's Graduate Advisor.

    e. The thesis will include the following components: approval sheet, abstract, research problem, literature review, methods, results, summary and conclusions, bibliography, and appendix (when appropriate). A style manual approved by the student's graduate committee shall be used by the student in preparing the thesis.

    f. The student will orally defend his/her thesis before the graduate committee and any other interested faculty.

    g. One copy of the student's thesis will be provided for the department files, in addition to the copies required by the Graduate School.

    h. An exit seminar, describing the research endeavor, will be presented to faculty and graduate students (usually) during the last semester of graduate study.

Graduate Course Work

The following listings are representative of the courses available for graduate students pursuing a degree in Natural Resources and Environmental Management (NREM). In planning a student's program, consideration will be given to his/her academic background, work experience, and future professional employment interests. Undergraduate chemistry, algebra, ecology and other courses may be required for students who lack academic preparation for the graduate program.

Required: 6-9 credits will be taken from:

NREM 608	Research Methodologies in Natural Resources and Environmental Science (3)
NREM 609	Seminar (3)
RES 697	Research Paper (3 credits) or
CRPR 698	Creative Project (3 or 6 credits) or
THES 698	Thesis (6)

Electives: A minimum or 21-24 credits will be taken with approval of the graduate advisor. Please note that some courses are offered only every other year or summers only (summer and winter workshops are indicated by *). Sample courses from areas of emphasis are listed below:

General (applies to all concentration areas):

NREM 502	Field Study (1 to 6)†
NREM 669	Paid Professional Practice (1 to 3) or
NREM 696	Professional Practice (1 to 3)
NREM 697	Special Studies in Natural Resources and Environmental Sciences (1 to 6)

†Extended field studies: Previous areas of study include western and eastern Europe, Canada, Costa Rica, and a variety of U.S. Geographic areas including Alaska, the Great Lakes, Yellowstone Park, Florida, Southwest U.S. and southern Indiana.

Environmental Management

NREM 507	Environmental Management in Developing Countries (3)
NREM 511	Water Resources (3)
NREM 515	Principles of Water Quality Management (3)
NREM 520	Wetland Characterization (3)*
NREM 541	Air Quality (3)
NREM 546	Indoor Environmental Quality (3)
NREM 547	Occupational/Industrial Hygiene (3)
NREM 548	Asbestos and Lead Management (3)*
NREM 581	Site Remediation Technologies (3)
NREM 585	Principles of Wastewater Treatment (3)
NREM 586	Computer Applications in Environmental Management (3)
NREM 587	Solid and Hazardous Waste Management (3)
NREM 588	Environmental Assessment and Analysis (3)
NREM 589	Emergency Response to Biological, Chemical, and Nuclear Hazards (3)
NREM 697	Special Studies in Natural Resources and Environmental Sciences (1 to 6)
GEOL 516	Engineering Geology (3)
GEOL 560	Hydrogeology (3)
HSC 582	Environmental Health (3)

Occupational/Industrial Hygiene & Indoor Air Quality

NREM 541	Air Quality (3)
NREM 546	Indoor Environmental Quality (3)
NREM 547	Occupational/Industrial Hygiene (3)
NREM 548	Asbestos and Lead Management (3) *
NREM 550	Hazardous Materials in Health and Safety (HAZWOPER) (3) *
NREM 586	Computer Applications in Environmental Management (3)
NREM 589	Emergency Response to Biological, Chemical, and Nuclear Hazards (3)
NREM 669	Paid Professional Practice (1-3) or
NREM 696	Professional Practice (1 to 3)
CHEM 520	Chemical Instrumentation I (3)
HSC 582	Environmental Health (3)
HSC 683	Epidemiology (3)
PHYSL 516	Human Toxicology (3)
ITMFG 560	Industrial Safety and Health (3)

Land Management

NREM 503	Environmental Economics (3)
NREM 504	Sustainable Agriculture (3)
NREM 505	Integrated Resource Management (3)
NREM 520	Wetland Characterization (3)*
NREM 522	Soil Quality (3)
NREM 524	Soil Classification and Interpretation (3)
NREM 527	Soil Conservation and Management (3)
NREM 531	Energy and Mineral Resources: Issues and Choices (3)
NREM 535	Renewable Energy and Sustainable Technology (3)
NREM 557	International Rural Development (3)
BIO 580	Limnology (3)
GEOG 542	Remote Sensing & Aerial Photo Interpretation 1 (3)
GEOG 544	Advanced Geographic Information Systems Analysis (3)
GEOL 560	Hydrogeology (3)
PLAN 533	Urban Environmental Planning (3)
PLAN 538	Regional Land-Use Planning (3)
POLS 547	Environmental Law and Policy (3)
POLS 561	Community Planning & Its Administration (3)

Environmental Education

NREM 509	Sociopolitical Dimensions of Global Environmental Change (3)
NREM 515	Principles of Water Quality Management (3)
NREM 521	Soil Resources (3)
NREM 531	Energy & Mineral Resources: Issues and Choices (3)
NREM 541	Air Quality (3)
NREM 572	Applied Research Methods in Resource Management (3)

NREM 577 Wilderness in Society (3)
NREM 587 Solid and Hazardous Waste Management (3)
NREM 592 Environmental Interpretation (3)
NREM 595 Teaching Environmental Education (3)
Additional courses in Biology, Geology, and Geography

Environmental Communication

NREM 505 Integrated Resource Management (3)
NREM 571 Outdoor Recreation and Society (3)
NREM 592 Environmental Interpretation (3)
NREM 595 Teaching Environmental Education (3)
Additional courses from BIO, BOT, COMM, JOURN, ITGRA, TCOM, and ZOOL

Park and Recreation Management

NREM 571 Outdoor Recreation and Society (3)
NREM 592 Environmental Interpretation (3)
NREM 572 Applied Research Methods in Resource Management (3)
NREM 573 Outdoor Recreation Planning and Administration (3)
NREM 577 Wilderness and Society (3)
NREM 505 Integrated Resource Management (3)
NREM 527 Soil Conservation and Management (3)
NREM 585 Principles of Wastewater Treatment (3)
NREM 587 Solid and Hazardous Waste Management (3)
Additional courses in BOT LA, MGT, BIO, or ZOOL

New courses are added periodically by university departments. The graduate advisor will inform students of new course offerings.

For additional information contact:
Dr. Amy Gregg, Graduate Advisor
Department of Natural Resources and Environmental Management,
Ball State University, Muncie, IN 47306.
Phone: (765) 285-5781; Fax (765) 285-2606
or email: algregg2@bsu.edu.

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT
GRADUATE APPLICATION FORM

Note: You can either print this form and mail or send the information/answers by e-mail to algregg2@bsu.edu. Complete this form in addition to the Ball State University Graduate School application. See website: http://www.bsu.edu/gradschool/admissions/

Name of Applicant:_____

Home Address: _____ Phone no. (___)_____
Number & Street

_____ Zip Code_____ Country_____
City & State

Email address: _____

Is English your primary language? Yes_____ No _____
If not, the Test of English as a Foreign Language must be taken. TOEFL Score _____

1. Undergraduate Major: _____ Minor:_____
   Degree: _____
   Received from: _____
2. Undergraduate GPA: _____
3. G.R.E. Scores: Verbal _____ Quantitative _____ Analytical Ability _____
4. Do you wish to be considered for a Graduate Assistantship? _____

Put answers for questions 5-7 on a separate sheet of paper.

5. Indicate your reasons for enrolling in the graduate program in Natural Resources and Environmental Management at Ball State University and briefly outline (approx. 1-2 pages) how this graduate experience will fit into your career goals.

6. List special interests, work experiences, and activities in with you have participated relative to natural resources and environmental management.

7. What research or creative interests to you have?

A complete application must include <u>an official transcript of all college credits completed to date</u> and <u>a photocopy of G.R.E. Scores</u> (if you did not list the BSU NREM Department as the authorized recipient of scores sent from ETS). Send this application form, your undergraduate transcript and G.R.E scores to: Graduate Advisor, Department of Natural Resources and Environmental Management, Ball State University, Muncie, IN 47306. In addition you must make arrangements for a minimum of two NREM departmental recommendation forms (completed by former professors or professional employment supervisors) to be sent directly to us by the individual completing the forms.

Master's Degree Recommendation Form
Department of Natural Resources and Environmental Management

PLEASE READ THE FOLLOWING BEFORE COMPLETING THIS FORM:

Applicant should sign this if applicable. I agree that this evaluation may be kept in confidence and shown only to bone fide university officials with legitimate interest in reviewing the same. I understand that by entering into this agreement I am waiving any right of inspection or review of this evaluation which may have been granted under the terms of the Family Education Rights and Privacy Act of 1974.

Signature_____ Date_____

Evaluator should sign this if applicable. I am furnishing this evaluation on the condition that it will not be shown to the applicant named below.

Signature_____ Date_____

NOTE: This evaluation will be kept in confidence from the applicant only if both statements are signed. There is no obligation on the part of either party to sign the statement.

Name of Applicant _____
Undergraduate Major_____ Minor _____
B.S. or B.A. degree granted by: _____
Institution of Higher Education

A. Please rate the applicant for each of the following characteristics (compared to other students you have taught on a scale of 1 to 9 (highest). Indicate N/A/ for no basis for judgment.

1. Intellectual Ability _____
2. Competence in major _____
3. Creativity _____
4. Oral Expression _____
5. Written Expression _____
6. Judgment & Maturity _____
7. Self-motivation _____
8. Integrity _____
9. Potential as Researcher _____
10. Potential as Teacher _____
11. Technical Laboratory Skills _____

B. This applicant's chances of successfully completing a Master's Degree program are:

Poor	Average	Outstanding
1 2 3	4 5 6	7 8 9

C. How would you describe the ease of supervising this applicant?

How Difficult	Average	Very Easy
1 2 3	4 5 6	7 8 9

D. How strongly do you recommend this applicant to Ball State University's Department of Natural Resources and Environmental Management?

Very difficult to recommend	Hard to recommend	Very easy to recommend
1 2 3	4 5 6	7 8 9

E. How long have you know this applicant? _____

In what capacity have you known this applicant? _____

_____

F. Other comments:

Signature of Evaluator: _____

Title: _____

Address: _____

_____

Phone: _____

Please return this evaluation to:

Dr. Amy Gregg
Graduate Advisor, Department of natural Resources and Environmental Management,
Ball State University, Muncie, IN 47306.
Phone: (765) 285-5781; Fax (765) 285-2606
or email: algregg2@bsu.edu

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT

GRADUATE ASSISTANTSHIPS

The Department of Natural Resources and Environmental Management at Ball State University, Muncie, Indiana, announces the availability of graduate assistantships for the 2014-2015 academic year. Students wishing to pursue a graduate degree (M.S., M.A., Ed.D. in Science, or Ed.D. in Science Education) with their major field in Natural Resources & environmental Management are invited to apply.

Examples of duties expected of graduate assistants include: 1) assisting faculty in their courses involving field trips or laboratory and discussion sections in an introductory course (Environment and Society); 2) assisting faculty with laboratory preparations in support of soil, water, and air quality courses; 3) working on specific research projects supported by external funding; and 4) assisting with other departmental functions (e.g. proctoring the computer lab or examinations, outreach/promotion of department programs, etc.).

Assistantships require approximately 20 hours of work in the department per week. Presently, graduate assistants receive a stipend for each academic year (maximum two years possible for M.A./M.S. students and three years for Ed.D. students) and receive a tuition remission; student fees in addition to tuition are not covered by the stipend.

For application materials, please contact:

Dr. Amy Gregg
Graduate Program Advisor
Department of Natural Resources & environmental Management
West Quad 118
Ball State University, Muncie, IN 47306
Email: algregg2@bsu.edu

Applications will be reviewed until all positions are filled. Review usually begins in early February for assistantships that start in the Fall semester of that same year. Only completed application files will be considered, which include GRE scores, letters of recommendation, college transcripts, TOEFL scores (if admitted as an International student), and the departmental application form; the applicant must be in good standing with the University and not on academic probation by the Graduate School.