State University of New York
College of Environmental Science and Forestry

GRADUATE PROGRAM
IN
ENVIRONMENTAL SCIENCE

Master of Professional Studies
(M.P.S.)
Degree

HANDBOOK

2007 - 2008
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I. INTRODUCTION

Welcome to the Graduate Program in Environmental Science (GPES) which, along with the undergraduate Environmental Studies Program, and the Randolph G. Pack Environmental Institute, is managed by the Faculty of Environmental Studies. We are delighted that you have joined a unique set of graduate students, faculty, and researchers who share a deep concern for the development and application of multidisciplinary approaches to the stewardship of our natural and built environments.

The operation of GPES is moderately complex. This is a result of the diversity of student backgrounds, the participation of faculty from across the College and Syracuse University, and the curricula design which balances a Core, with Area-of-Study depth, and individualized synthesis.

Hierarchically, the State Education Department and S.U.N.Y. establish basic policy for all graduate programs. Within E.S.F, a comprehensive set of Graduate Policies have been adopted by the College Faculty. These are published in the College Catalog. The policies and the procedures which implement College policy are contained in “Graduate Academic Policies and Procedures - Faculty Handbook” (GAPP). These are available for review with your major professor. Internally GPES has evolved a number of specific policies, procedures, and guidelines for the effective delivery of the program.

This Handbook is intended as our primary guide to GPES for both students and faculty. In keeping with the policy orientation of our program it is appropriate and desirable for all participants to periodically both question why a certain requirement or procedure exists, and to offer constructive criticism through the Faculty’s governance structure or informally via discussion. It is only through this dynamic exchange that GPES will continue to evolve and prosper.
II. REQUIREMENTS FOR THE M.P.S. DEGREE

The ESF Catalog description provides the basic framework of graduation requirements. To facilitate detailed program planning and graduation documentation GPES uses a Plan Sheet. Each Major Professor keeps an updated version in their advising file, and each student is encouraged to keep an updated personal copy. A completed Plan Sheet must be attached to the College’s Form 3B when submitted for approval by the Chair. Plan sheets are available in the Environmental Studies office. A copy of the Plan Sheet follows this description.

1. Prerequisites.
Deficiencies in undergraduate level Micro Economics or Environmental Economics, Ecology, or Statistics are identified in the letter of admission. If not completed prior to matriculation these must be taken as co-requisites during the first two semesters of residence. Undergraduate or graduate courses may be taken to satisfy deficiencies. Undergraduate courses are not included in Grade Point Averages, and do not count toward satisfying the minimum number of required graduate credit hours. Graduate courses will be included in Grade Point Averages. Graduate level deficiency courses may not be used in a Plan Sheet for Core, or Area of Study requirements.

2. Advanced Standing.
   a. Course transfers. A maximum of six graduate credit hours with a grade of B or above that have not been applied to another degree may be transferred via Petition. The Petition must include an attached syllabus, and a justification of how the courses are to be included on the student's Plan Sheet. Petitions for course transfers are submitted following matriculation.
   
   b. Credit for prior experience. Applicants with a minimum of three (3) years of post-baccalaureate full-time professional experience directly related to the intended area of study may apply for 6 credit hours of advanced standing in the program. Partial credit for experience cannot be awarded. When awarded for prior work experience, the 6 credit hours are applied toward the Synthesis requirement.

3. Concurrent Degree.
Concurrent degree students may "double-count" 8 cr. hrs. toward their M.P.S. degree.

4. Program Requirements.
The Master of Professional Studies (MPS) degree is a 39 credit hour experience aimed at professional applications of environmental knowledge.

   a. Core. Required course work: A total of 21 credit hours with the following distribution: 9 credit hours of applied social sciences, 6 credit hours in environmental science, and 6 credit hours in methods course emphasizing applications of technical knowledge.
   
   b. Area of Study: A minimum of 12-15 credit hours of course work in the chosen area of study, as determined by the major professor and study area faculty. Students select a study area at the time of application for admission into the program. Five study areas are available to MPS students: (i) Environmental Policy and Democratic Processes, (ii) Environmental and Community Land Planning, (iii) Water and Wetland Resources, (iv) Environmental Systems and Risk Management and (v) Environmental Communication and Participatory Processes.
c. Synthesis. Students select either an Internship 3-6 credit hours or prepare a synthesis paper (3 credit hours). All students must present a capstone seminar in their final semester. No terminal comprehensive examination is required. See Appendix B for internship guidance.
# MPS PLAN SHEET

**Student:**

**Semester Entered:**

**Phone:**

**Email:**

**Area:**

## Semester:

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Unmet Requirements:
PROGRAM ADMINISTRATION

Student: ___________________________ Semester Entered: ________________

Degree: Ph.D. □ M.S. □ M.P.S. □ Area of Study:

Address: ________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Phone: ___________________________ Email: _________________________________

Deficiencies: ___________________________ Semester Remedied: ________________

________________________________________________________________________

Administrative Requirements Completed:

3B Form □ Yes Date: ____________________________

Thesis/Internship Proposal: □ Yes Date: ____________________________

Title: _______________________________________________________________

________________________________________________________________________

Steering Committee:

1) __________________________________________ Phone ______________________
2) __________________________________________ Phone ______________________
3) __________________________________________ Phone ______________________
4) __________________________________________ Phone ______________________

Examiners (M.S., Ph.D. only):

1) __________________________________________ Phone ______________________
2) __________________________________________ Phone ______________________
3) __________________________________________ Phone ______________________
4) __________________________________________ Phone ______________________

Defense/Exam Chair (M.S., Ph.D. only):

________________________________________________________________________

Capstone Seminar: □ Yes Date: ____________________________ Time and Location: ____________________________

TA/RAs Held:

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<th>Semester</th>
<th>Course/Project</th>
<th>Supervisor</th>
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</table>
Student is Accepted into M.P.S. program

Major Professor and Steering Committee Appointed (Form 2)

Program of Study Planned by end of First Semester (Form 3B)

Semesters Planned and Coursework Completed (S.C.O.R.E. Forms each semester)

Comprehensive Exam (Depends on program) (Form 8)

Verification that All Academic Requirements are Completed (Form 9)

Student Submits Diploma Form and Pays Commencement Fees

Commencement and Convocation

Capstone Seminar (Varies between programs)

Schematic of M.P.S. Degree Requirements
III. FACULTY GOVERNANCE

A. Environmental Studies

The Environmental Studies Faculty is organized with an Executive Committee, and two standing Committees: Undergraduate, and Graduate. The Graduate Committee includes the Program Director, instructors of record of the core courses, coordinators for each Area of Study, and a student representative. Its role is to monitor the program's effectiveness, and to develop proposals for the consideration of the full Faculty. In 1994 the Faculty amended its bylaws to formally permit student membership. The text of this section III D is contained below.

"III.D. Student Representation to Faculty Meetings"

1. GPES Student representatives to the Faculty Meetings must be full-time students.

2. Representation to Faculty Meetings shall consist of two students: one GPES Ph.D. student and one GPES Masters student.

3. Student representatives will serve a one-year term and have the following responsibilities:
   a. Each representative is expected to attend all Faculty Meetings and must inform other representatives and the Faculty Chair if unable to do so.

   b. Each representative may vote on Faculty Meeting agenda items with one vote per student representative. Graduate student representatives will not vote on matters that are exclusively undergraduate.

   c. Each student representative is expected to serve as a liaison between the graduate student constituency and ES Faculty.

4. Selection of Student Representatives.
   a. A meeting will be announced early in the Fall semester by the Graduate Program Director. The purpose of this meeting is to inform graduate students of representatives' responsibilities and choose graduate student representatives.

   b. The list of Student Representatives to Faculty Meetings will be presented to the Faculty Chair no later than October 1.

B. Areas of Study

GPES' primary vehicle for engaging multidisciplinary subjects is the Area of Study. These represent the loci of faculty research and scholarship interests which have been formally approved by the Faculty. Minimum thresholds include three active faculty including a coordinator, and five graduate E.S.F. courses. Areas of Study are periodically revised to reflect evolving interests and resources. Areas of Study are structured as standing subcommittees, with a coordinator, and participating Major Professors. Subcommittees may have student members. A list of functions associated with Study Areas is given in Appendix C.

All students in GPES are admitted directly into an Area of Study. Students are strongly encouraged to network with their peers and to actively participate in their Area of Study.
IV. RESOURCES

Environmental Studies has limited staff, facility, and financial resources. Over the past few years we have developed management approaches for their effective and equitable utilization.

A. Environmental Studies Office Suite 106-107 Marshall Hall

The suite has three primary segments: Production Staff, Records and Communications, and the Chair's Office. The Office maintains files (unofficial) of student records, folders of job and research announcements, course syllabi, and internship requests. It maintains a collection of GPES Thesis, Dissertations, Research Proposals, and Internship Reports which are available for reference.

Most students at some time during their studies encounter problems of a personal or academic nature for which they require assistance. An early full discussion of the situation and options is often the key to their resolution. Major Professors, the GPES Director, and the Faculty Chair are all available to facilitate this process. Office staff can assist in making appointments as necessary.

B. Conference Room 105 Marshall Hall

The Conference Room is the setting for Faculty Meetings and GPES seminars, including graduate students’ capstone seminars. The room may be scheduled for student meetings. During unscheduled periods it is available for informal graduate student discussions and study. Stored in the conference room are the Faculty's Slide Projector, VCR, TV, Laptop Computers, and LCD Projectors which may be borrowed by graduate students for class presentations.

GPES Mailboxes - Outside 105 Marshall Hall

These are the primary mechanism for internal College and Faculty communications. Students should make it a practice to visit their box at least once a week. The mailboxes should not be used to receive U.S. Mail, and the GPES Office Staff cannot receive personal phone messages for students.

C. Office Space

It has been the general practice of the College that graduate students are provided with a desk space on an as-need basis. Because of limited facilities and the flux of students in residence, the assignment of such space usually takes a few weeks each fall. Students whose Major Professor's primary appointment is on another Faculty, should first ask for space available from that group. GPES has space for approximately 32 students available in B5 Marshall Hall, B7 Marshall Hall and 406B Bray Hall. The Office Staff maintains a list of requests and vacancies. Periodically, GPES arranges with other Faculties to use surplus space on a semester by semester basis.
D. Assistantships

There are two basic forms of assistantships, Graduate (GA), and Research (RA). GA’s are awarded by the College each year based on Faculty recommendations. They are primarily used for Teaching Assistantships in undergraduate and graduate courses. In 2006-2007 GPES had 17 semester positions for its approximately 75 graduate students. Each spring students who will be returning in the Fall are notified by the GPES Director of the projected GA allocation and requested to formally apply. Incoming admitted students are also included in the selection process. A faculty committee prioritizes the applications for administrative action.

As a graduate-research College ESF is involved in numerous externally funded projects most of which involve RA’s. Each project is managed by a Principal Investigator who has the responsibility of selecting staff. GPES has no direct involvement in this process. Students interested in RA’s should discuss opportunities with their Major Professor. Throughout the year the Graduate Office and Research Office circulate research, fellowship, and internship announcements. Students should periodically check their mailboxes, the appropriate ES folders, and the ES bulletin board.

The Edna Bailey Sussman Fund provides stipends to support graduate student summer internship experiences. The Fund has supported approximately 20 ESF students per year, about one-quarter of whom have been GPES students. Sussman supports a broad range of interest areas, from environmental policy, regulation and communication to various environmental sciences. Sussman applications are treated competitively; awards are usually in the range of $4,800 for full-time internship employment. Applications must be filed by the annual application deadline, usually in early March. Awards are announced in early May. Proposal guidelines are available in February from the Office of Instruction and Graduate Studies located in 227 Bray.
APPENDIX A.1
MASTER OF PROFESSIONAL STUDIES (M.P.S.) DEGREE
ENVIRONMENTAL COMMUNICATION & PARTICIPATORY PROCESSES
STUDY AREA
Advising Guide

General Requirements. The minimum credit hours required for the MPS degree are:

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<th>Credit Hours</th>
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<td>2 Environmental Science Seminars</td>
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<td>Applied Social Science</td>
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<td>Environmental Science</td>
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<tr>
<td>Methods</td>
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<td>Area of Study</td>
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<td>Synthesis</td>
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<td><strong>Total</strong></td>
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Environmental Science Seminar. All students are required to take two (2) semesters of ENS 797 Environmental Science Seminar or, with Major Professor permission, appropriate seminars in other Faculties at the College or Syracuse University (the latter for credit only). ENS 797 is normally completed as an Audit, but at times may be taken for credit if offered. Credit hours when awarded may be applied against the Applied Social Science requirement.

Applied Social Science. 9 credit hours should be selected from the following course list. In some cases, other appropriate courses may fulfill this requirement in the larger context of a student’s program. These substitutions require approval by the major professor.

- ANT 683 Social Movement Theory
- EST 550 Environmental Impact Analysis
- EST 608 Environmental Advocacy Campaigns and Conflict Resolution
- EST 626 Concepts and Principles of Sustainable Development
- EST 640 Environmental Thought and Ethics
- FOR 564 Soil and Water Conservation Policy
- FOR 665 Natural Resources and Environmental Policy
- FOR 753 Advanced Natural Resource and Environmental Policy
- GEO 558 Sustainable Development
- IST 552 Information Systems Analysis Concepts and Practices
- IST 607 Government and Information
- IST 642 Electronic Commerce
- IST 643 U. S. Federal Information Policy
- LAW 716 Environmental Law
- PPA 709 Public Organizations and Management
- PPA 730 Problems in Public Administration
- PPA 753 Executive Leadership and Policy
- PSC 602 Public Policy Analysis: Theory and Practice
- PSC 705 Science and Public Policy
- SPC 514 Language and Meaning
- SPC 535 Communication and Community
- SPC 546 Seminar Legal Communication
Environmental Science. 6 credit hours, frequently selected from the following course list:

- EFB 516 Ecosystems
- EFB 518 Systems Ecology
- EFB 522 Ecology, Resources, and Development
- EFB 524 Limnology
- EFB 542 Freshwater Wetland Ecosystems
- EFB 545 Forest Decline Concepts
- EFB 590 Wilderness Wildlife Conservation
- EFB 611 Topics in Environmental Toxicology
- EFB 796 Special Topics: Environmental Forest Biology
- ERE 505 Solid Waste Management
- ERE 510 Energy: Alternate Systems
- ERE 552 Fundamentals of Remote Sensing
- ERE 642 Water Quality Modeling
- FOR 542 Watershed Management
- FOR 643 Forest Hydrology
- FOR 680 Urban Forestry

Methods. 6 credit hours, usually selected from the following:

- EST 604 Social Survey Research Methods for Environmental Issues
- EST 605 Qualitative Methods
- PPA 722 Quantitative Analysis
- SOS 620 Interpersonal Conflict Resolution Skills
- SOS 621 Mediation: Theory and Practice
- SOS 622 Negotiation: Theory and Practice
- SOS 623 Leadership: Theory and Practice
- SOS 624 Conflict Resolution in Groups
- SOC 614 Introduction to Qualitative Research
- SPC 655 Speech Criticism

Area of Study. 12 credit hours. Area of Study course work is chosen in consultation with the Major Professor and Steering Committee. At least 6 credit hours of ENS coursework must be completed from the list of courses provided below, excluding any independent studies courses (ENS 798). The other six credit hours may be selected from the courses listed below or from other appropriate courses that become available.

- CMN/ENS 696 Mass Media and Environmental Affairs
- EST 608 Environmental Advocacy Campaigns and Conflict Resolution
- EST 612 Environmental Policy and Governance
- EST 626 Concepts and principles of Sustainable Development
- EST 635 Public Participation and Decision Making: Theory and Application
- EST 640 Environmental Thought and Ethics
- EST 650 Environmental Perception and Human Behavior
- EST 673 Environmental Information Policy
- FOR 690 Seminar and Workshop on Natural Resources Policy and Management
- EFB 521 Principles of Interpretive Programming
EFB 617 Perspectives on Interpretive Design  
MIS 545 Decision Support Systems  
MIS 745 Decision Support Systems  
MAR 741 Marketing Community and Public Service Agencies  
SHR 703 Interpersonal and Group Skills for Managers  
ANT/LILN/SOC 570 Topics in Sociolinguistics  
ANT 652 Cultural Aspects of Public Policy  
ANT/WSP Culture and Folklore  
ANT 675 Culture and Disputing

**Synthesis.** 6 credit hours, completed as ENS 898 Professional Experience or as Directed Electives, determined in consultation with the Major Professor. See the program Handbook for internship information. Directed electives are done in consultation with a professor.

**Other Requirements.** In addition to course and credit hour requirements, students are required to:

1. File a Form 3B (Academic Plan), attaching a program Plan Sheet, with the Office of Instruction and Graduate Studies (227 Bray) by the end of the second semester of full-time study.

2. Form a Steering Committee of the Major Professor and one additional faculty member before undertaking the Synthesis requirement. Form 2A is available in Marshall 107.

3. Offer a Capstone Seminar, reporting either on planned or completed Synthesis activity.

Note: No written or oral comprehensive examination is required.
APPENDIX A.2
MASTER OF PROFESSIONAL STUDIES (M.P.S.) DEGREE
ENVIRONMENTAL POLICY AND DEMOCRATIC PROCESSES
STUDY AREA

Advising Guide

**General Requirements.** The minimum credit hours required for the degree are:

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<th>Credit Hours</th>
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<th>Applied Social Science</th>
<th>Environmental Science</th>
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<th>Area of Study</th>
<th>Synthesis</th>
<th>Total</th>
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<td>6</td>
<td>6</td>
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**Environmental Science Seminar.** All students are required to take two (2) semesters of ENS 797 Environmental Science Seminar or, with Major Professor permission, appropriate seminars in other Faculties at the College or Syracuse University (the latter for credit only). ENS 797 is normally completed as an Audit, but at times may be taken for credit if offered. Credit hours when awarded may be applied against the Applied Social Science requirement.

**Applied Social Science.** 9 credit hours, selected from the following course list:

- EST 608 Environmental Advocacy Campaigns and Conflict Resolution
- EST 612 Environmental Policy and Governance
- EST 626 Concepts and Principles of Sustainable Development
- EST 635 Public Participation and Decision Making
- EST 640 Environmental Thought and Ethics
- EST 650 Environmental Perception and Human Behavior

**Environmental Science.** 6 credit hours, frequently selected from the following course list:

- EFB 516 Ecosystems
- EFB 518 Systems Ecology
- EFB 522 Ecology, Resources, and Development
- EFB 524 Limnology
- EFB 542 Freshwater Wetland Ecosystems
- EFB 545 Forest Decline Concepts
- EFB 590 Wilderness Wildlife Conservation
- EFB 611 Topics in Environmental Toxicology
- ERE 505 Solid Waste Management
- ERE 510 Energy: Alternate Systems
- ERE 552 Fundamentals of Remote Sensing
- ERE 642 Water Quality Modeling
- FOR 643 Forest Hydrology
- FOR 680 Urban Forestry
- LSA 654 Ecology in Landscape Design and Planning
Methods. 6 credit hours, usually selected from the following:

APM 635 Multivariate Statistical Methods
APM 625 Intro to Sampling Techniques
EFB 518 Systems Ecology
EST 604 Social Survey Research Methods for Environmental Issues
EST 605 Qualitative Methods
ERE 550 Introduction to GIS
ERE 552 Fundamentals of Remote Sensing
ERE 566 Global Positioning Systems I
ERE 642 Water Quality Modeling
FOR 556 Spatial Modeling
FOR 557 Practical Vector GIS
FOR 558 Advanced Vector GIS
PPA 722 Quantitative Analysis
PSC 602 Public Policy Analysis Theory and Practice
SOC 614 Introduction to Qualitative Research

Area of Study. 12 credit hours. Area of Study course work is chosen in consultation with the Major Professor and Steering Committee. Generally, this coursework is seen as an extension of coursework begun in the Core, and will be taken from the list of courses below, although other courses at times may be selected. At least 6 credit hours of ENS coursework must be completed from the list of courses provided below, excluding any independent studies courses (ENS 798).

ENS 601 Water Resources Management
EST 608 Environmental Advocacy Campaigns and Conflict Resolution
EST 612 Environmental Policy and Governance
EST 626 Concepts and Principles of Sustainable Development
EST 635 Public Participation and Decision Making
EST 640 Environmental Thought and Ethics
EST 650 Environmental Perception and Human Behavior
EST 673 Environmental Information Policy
ERE 550 Introduction to GIS
FOR 564 Soil and Water Conservation Policy
FOR 665 Natural Resources and Environmental Policy
FOR 753 Advanced Natural Resource and Environmental Policy
GEO 558 Sustainable Development
GEO 593 Environmental Monitoring and Assessment
GEO 720 Seminar on Latin America
IST 552 Information Systems Analysis Concepts and Practices
IST 607 Government and Information
IST 642 Electronic Commerce
IST 643 U. S. Federal Information Policy
LAW 716 Environmental Law
PPA 709 Public Organization and Management
PPA 730 Problems in Public Administration
PPA 775 Energy, Environment, Resources Policy
PSC 602 Public Policy Analysis Theory and Practice
PSC 705 Science and Public Policy
**Synthesis.** 6 credit hours, completed as ENS 898 Professional Experience or as Directed Electives, selected in consultation with the Major Professor; see program Handbook for internship information.

**Other Requirements.** In addition to course and credit hour requirements, students are required to:

1. File a Form 3B (Academic Plan), attaching a program Plan Sheet, with the Office of Instruction and Graduate Studies (227 Bray) by the end of the second semester of full-time study.

2. Form a Steering Committee of the Major Professor and one additional faculty member before undertaking the Synthesis requirement.

3. Offer a Capstone Seminar, reporting either on planned or completed Synthesis activity.

Note: No Comprehensive Examination is required.
APPENDIX A.3
MASTER OF PROFESSIONAL STUDIES (M.P.S.) DEGREE

ENVIRONMENTAL AND COMMUNITY LAND PLANNING
STUDY AREA

Advising Guide

General Requirements. The minimum credit hours required for the degree are:

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<th>Course</th>
<th>Credit Hours</th>
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</thead>
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<tr>
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</tr>
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<td>6</td>
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<tr>
<td>Methods</td>
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</tr>
<tr>
<td>Area of Study</td>
<td>12</td>
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<tr>
<td>Synthesis</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

Environmental Science Seminar. All students are required to take two (2) semesters of ENS 797 Environmental Science Seminar or, with Major Professor permission, appropriate seminars in other Faculties at the College or Syracuse University (the latter for credit only). ENS 797 is normally completed as an Audit, but at times may be taken for credit if offered. Credit hours when awarded may be applied against the Applied Social Science requirement.

Applied Social Science. 9 credit hours including at least 6 in ENS course work, selected from the following list:

- EST 608 Environmental Advocacy Campaigns and Conflict Resolution
- EST 612 Environmental Policy and Governance
- EST 626 Concepts and Principles of Sustainable Development
- EST 635 Public Participation and Decision Making: Theory and Application
- EST 640 Environmental Thought and Ethics
- EST 650 Environmental Perception and Human Behavior
- LSA 621 Design Studio IV: Community Design and Planning
- LSA 652 Community Development and Planning Process
- LSA 696 Special Topics: Community Planning Seminar

Environmental Science. 6 credit hours, frequently selected from the following course list:

- EFB 516 Ecosystems
- EFB 518 Systems Ecology
- EFB 522 Ecology, Resources, and Development (2 credit hrs.)
- EFB 524 Limnology
- EFB 542 Freshwater Wetland Ecosystems
- EFB 545 Forest Decline Concepts
- EFB 611 Topics in Environmental Toxicology
- ERE 505 Solid Waste Management
- ERE 510 Energy: Alternate Systems
- ERE 552 Fundamentals of Remote Sensing
- FOR 540 Watershed Hydrology
FOR 680 Urban Forestry

**Methods.** 6 credit hours, usually selected from the following:

- EFB 519 Geographic Modelling
- EST 604 Social Survey Research Methods for Environmental Issues
- EST 605 Qualitative Research Methods
- FOR 556 Spatial Modeling
- FOR 557 Practical Vector GIS
- FOR 558 Advanced Vector GIS
- LSA 640 Research Methodology

**Study Area Coursework.** 12 credit hours. Area of Study course work beyond the Core and Research Methods requirements is chosen in consultation with the Major Professor and Steering Committee. Generally, this course work is seen as an extension of course work begun in the Core, and will be taken from the list of courses below (or from those listed above that are not used to satisfy requirements), although other courses at times may be selected. At least 6 credit hours of ENS/LSA course work beyond that taken in the Core must be completed from the list of courses provided below, excluding any independent studies courses (ENS/LSA 798).

- EFB 617 Perspectives on Interpretive Design
- EFB 617 Perspectives on Interpretive Design
- CIE 541 Transportation Engineering
- EST 550 Environmental Impact Analysis
- EST 673 Environmental Information Policy
- ERE 550 Introduction to GIS
- ERE 552 Fundamentals of Remote Sensing
- FOR 540 Watershed Hydrology
- FOR 542 Watershed Management
- FOR 556 Spatial Modeling
- FOR 557 Practical Vector GIS
- FOR 558 Advanced Vector GIS
- FOR 564 Soil and Water Conservation Policy
- FOR 665 Natural Resources and Environmental Policy
- FOR 670 Resource Economics
- FOR 671 Economics of Nonmarket Goods
- FOR 674 Commercial Recreation
- FOR 676 Tourism Planning
- FOR 678 Wilderness/River Recreation Management
- FOR 679 Outdoor Recreation Management
- FOR 680 Urban Forestry
- GEO 583 Environmental Geographical Information Systems
- GEO 605 Theories of Development
- GEO 781 Seminar: Cartography
- GEO 782 Seminar: Geographic Information Analysis
- GEO 558 Sustainable Development Concepts and Practicum
- IST 552 Information Systems Analysis Concepts and Practices
- LSA 611 Natural Processes in Planning and Design
- LSA 621 Community Design and Planning
LSA 651 Comprehensive Land Planning  
LSA 652 Community Development and Planning Process  
LSA 654 Ecology in Landscape Design and Planning  
LSA 680 Seminar in Urban Design  
LSA 681 Cultural Landscape Preservation  
PPA 730 Problems in Public Administration

**Synthesis.** 6 credit hours, completed as ENS 898 Professional Experience or as Directed Electives, selected in consultation with the Major Professor; see program Handbook for internship information.

**Other Requirements.** In addition to course and credit our requirements, students are required to:

1. File a Form 3B (Academic Plan), attaching a program Plan Sheet, with the Office of Instruction and Graduate Studies (227 Bray) by the end of the second semester of full-time study.

2. Form a Steering Committee of the Major Professor and one additional faculty member before undertaking the Synthesis requirement.

3. Offer a Capstone Seminar, reporting either on planned or completed Synthesis activity.

Note: No Comprehensive Examination is required.
APPENDIX A.4
MASTER OF PROFESSIONAL STUDIES (M.P.S.) DEGREE
WATER AND WETLAND RESOURCES
STUDY AREA

Advising Guide

General Requirements. The minimum credit hours required for the degree are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Applied Social Science</td>
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<tr>
<td>Research Methods</td>
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<td>Area of Study/Environmental Science</td>
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<tr>
<td>Synthesis</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong>*</td>
</tr>
</tbody>
</table>

*A minimum of 6 credit hours in ENS course work is required.

Special Note on Academic Background. Students must have appropriate background in chemistry, biology, physics, earth science and computer programming and application. All students should have at least one course in physical water science (e.g., hydrology, hydrogeology, geology, aquatic chemistry, aquatic biology) as well as demonstrated competence in at least one of these aquatic science areas (experience, undergraduate course work, and/or graduate course work). Recommended courses include: (i) Physical Water Science: CIE453, FOR540, FEG340, FOR641, GOL544, and GOL542; (ii) Aquatic Chemistry and Toxicology: CIE551, FCH515, FCH496, GOL652, FCH510, and EFB560; (iii) Aquatic Biology: EFB524 and EFB525; and (iv) Wetlands Science EFB518, EFB542, EFB580 and EFB691.

Environmental Science Seminar. All students are required to take two (2) semesters of ENS 797 Environmental Science Seminar or, with Major Professor permission, appropriate seminars in other Faculties at the College or Syracuse University (the latter for credit only). ENS 797 is normally completed as an Audit, but at times may be taken for credit if offered. Credit hours when awarded may be applied against the Applied Social Science requirement.

Applied Social Science. 9 credit hours. Study Area faculty may indicate which if any courses listed below are particularly recommended, and courses not listed here may be substituted with agreement of Study Area faculty.

ENS 601* Water Resources Management
EST 608 Environmental Conflict and Citizen Groups
EST 612 Environmental Policy and Governance
EST 625* Wetlands Policy
EST 626 Concepts and Principles of Sustainable Development
EST 635 Public Participation and Decision Making
EST 640 Environmental Thought and Ethics
EST 650 Environmental Perception and Human Behavior
EST 673 Environmental Information Policy
FOR 564* Soil and Water Conservation Policy
FOR 665 Natural Resources and Environmental Policy
FOR 670 Resource Economics
FOR 671 Economics of Nonmarket Goods
FOR 753 Advanced Natural Resource and Environmental Policy
LAW 716 Environmental Law
PPA 709 Public Organization and Management
PPA 730 Problems in Public Administration
PSC 705 Science and Public Policy
GEO 593 Environmental Monitoring and Assessment
IST 552 Information Systems Analysis Concepts and Practices
IST 607 Governments and Information
IST 642 Electronic Commerce
IST 643 U. S. Federal Information Policy

* Indicates water resources policy courses.

**Research Methods.** 6 credit hours, usually selected from the following:

- APM 510 Statistical Analysis
- APM 620 Analysis of Variance
- APM 625 Introduction to Sampling Techniques
- APM 635 Multivariate Statistical Methods
- ERE 550 Introduction to GIS
- ERE 552 Fundamentals of Remote Sensing
- ERE 563 Photogrammetry I
- ERE 642 Water Quality Modeling
- EST 605 Qualitative Methods
- GEO 583 Environmental GIS
- GEO 587 Multivariate Statistical Applications in Geography
- LSA 640 Research Methodology
- PPA 722 Quantitative Analysis
- PSC 602 Public Policy Analysis
- SOC 614 Introduction to Qualitative Research

**Area of Study.** 18 credit hours. Study Area coursework beyond the Core and Research Methods requirements is identified by Study Area faculty and chosen in consultation with the Major Professor and Steering Committee. Frequently recommended courses are:

- CIE 525 Environmental Fluid Mechanics
- CIE 570 Water and Wastewater Treatment Design
- CIE 652 Biological Waste Treatment
- CIE 653 Applied Aquatic Chemistry
- CIE 659 Advanced Hydrogeology
- EFB 516 Ecosystems
- EFB 518 Systems Ecology
- EFB 522 Ecology, Resources and Development
- EFB 524 Limnology
- EFB 525 Limnology Lab
EFB 542 Freshwater Wetland Ecosystems  
EFB 611 Topics in Environmental Toxicology  
ENS 607 Wetland Practicum  
ERE 552 Fundamentals of Remote Sensing  
ERE 642 Water Quality Modeling  
ERE 643 Water Pollution Engineering  
EST 625 Wetlands Policy  
FEG 340 Engineering Hydrology and Hydraulics  
FCH 496 Special Problems in Chemistry  
FCH 515 Methods of Environmental Chemical Analysis  
FOR 542 Watershed Management  
FOR 556 Spatial Modeling  
FOR 557 Practical Vector GIS  
FOR 558 Advanced Vector GIS  
FOR 564 Soil and Water Conservation Policy  
GOL 541 Hydrogeology  
GOL 542 Geomorphology  
GOL 642 Advanced Hydrogeology  
GOL 652 Hydrogeochemistry

**Synthesis.** 6 credit hours, completed as ENS 898 Professional Experience or as Directed Elective, selected in consultation with the Major Professor; see program Handbook for internship information.

**Other Requirements.** In addition to course and credit hour requirements, students are required to:

1. Form a Steering Committee of the Major Professor and one additional faculty members by the end of the second semester of full-time study.

2. File a Form 3B (Academic Plan), attaching a program Plan Sheet, with the Office of Instruction and Graduate Studies (227 Bray) by the end of the second semester of full-time study. Students initiate this action in consultation with the Major Professor who files a request to form the committee.

3. Offer a Capstone Seminar on the thesis or project, reporting either on planned or completed synthesis activity.

Note: No Comprehensive Examination is required.
APPENDIX A.5
MASTER OF PROFESSIONAL STUDIES (M.P.S.) DEGREE

ENVIRONMENTAL SYSTEMS AND RISK MANAGEMENT
STUDY AREA

Advising Guide

General Requirements. The minimum credit hours required for the degree are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Science Seminar</td>
<td>0</td>
</tr>
<tr>
<td>Applied Social Science</td>
<td>9</td>
</tr>
<tr>
<td>Environmental Science Methods</td>
<td>6</td>
</tr>
<tr>
<td>Area of Study</td>
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<tr>
<td>Synthesis</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

Environmental Science Seminar. All students are required to take two (2) semesters of ENS 797 Environmental Science Seminar or, with Major Professor permission, appropriate seminars in other Faculties at the College or Syracuse University (the latter for credit only). ENS 797 is normally completed as an Audit, but at times may be taken for credit if offered. Credit hours when awarded may be applied against the Applied Social Science requirement.

Applied Social Science. 9 credit hours, selected from the following course list:

- FOR 507 Environmental Economics
- FOR 670 Resource Economics
- FOR 671 Economics of Non-Market Goods
- EST 608 Environmental Advocacy Campaigns and Conflict Resolution
- EST 612 Environmental Policy and Governance
- EST 626 Concepts and Principles of Sustainable Development
- EST 635 Public Participation and Decision Making
- EST 640 Environmental Thought and Ethics
- EST 650 Environmental Perception and Human Behavior

Environmental Science. 6 credit hours, frequently selected from the following course list:

- EFB 516 Ecosystems
- EFB 518 Systems Ecology
- EFB 522 Ecology, Resources, and Development
- EFB 524 Limnology
- EFB 542 Freshwater Wetland Ecosystems
- EFB 545 Forest Decline Concepts
- EFB 590 Wilderness Wildlife Conservation
- EFB 611 Topics in Environmental Toxicology
- ERE 505 Solid Waste Management
- ERE 510 Energy: Alternate System
- ERE 552 Fundamentals of Remote Sensing
- ERE 642 Water Quality Modeling
FOR 641 Watershed Hydrology and Water Quality
FOR 680 Urban Forestry
LSA 654 Ecology in Landscape Design and Planning

Methods. 6 credit hours, usually selected from the following:

EST 604 Social Survey Research Methods for Environmental Issues
EST 605 Qualitative Methods
APM 635 Multivariate Statistical Methods
CIS 680 Topics in Theory of Computation and Computational Logic
EFB 518 Systems Ecology
ERE 550 Introduction to GIS
ERE 552 Fundamentals of Remote Sensing
ERE 566 Global Positioning Systems I
ERE 642 Water Quality Modeling
FOR 557 Practical Vector GIS
FOR 558 Advanced Vector GIS
PPA 722 Quantitative Analysis
SOC 614 Introduction to Qualitative Research

Area of Study. 12 credit hours. Area of Study coursework is chosen in consultation with the Major Professor and Steering Committee. Generally, this coursework is seen as an extension of coursework begun in the Core, and will be taken from the list of courses below, although other courses at times may be selected. At least 6 credit hours of ENS coursework must be completed from the list of courses provided below, excluding any independent studies courses (ENS798):

ENS 601 Water Resources Management
ENS 607 Wetland Practicum
EST 608 Environmental Advocacy Campaigns and Conflict Resolution
EST 612 Environmental Policy and Governance
EST 626 Concepts and Principles of Sustainable Development
EST 650 Environmental Perception and Human Behavior
EST 673 Environmental Information Policy
ERE 550 Introduction to GIS
FOR 564 Soil and Water Conservation Policy
FOR 665 Natural Resources and Environmental Policy
FOR 753 Advanced National Resource and Environmental Policy
GEO 558 Sustainable Development
GEO 593 Environmental Monitoring and Assessment
IST 552 Information Systems Analysis Concepts and Practices
IST 607 Government and Information
IST 642 Electronic Commerce
IST 643 U. S. Federal Information Policies
LAW 716 Environmental Law
LAW 757 Natural Resources Law
PPA 709 Organizational Theory Public Organization and Management
PPA 730 Problems in Public Administration
PSC 602 Public Policy Analysis
PSC 705 Science and Public Policy
CEN 573 Principles and Design in Air Pollution Control
CIE 529 Risk Analysis in Civil Engineering
CIE 554 Principles of Environmental Toxicology
CIE 653 Applied Aquatic Chemistry
EFB 518 Systems Ecology
EFB 610 Ecological Biogeochemistry
EFB 611 Environmental Toxicology
ERE 505 Solid Waste Management
ERE 510 Energy: Alternate Systems
ERE 642 Water Quality Modeling
ERE 643 Water Pollution Engineering
ERE 785 Scanning Electron Microscopy
FCH 510 Environmental Chemistry I
FCH 511 Environmental Chemistry II
FCH 515 Methods of Environmental Chemical Analysis
FOR 556 Spatial Modeling
FOR 557 Practical Vector GIS
FOR 558 Advanced Vector GIS

**Synthesis.** 6 credit hours, completed as ENS 898 Professional Experience or as Directed Electives, selected in consultation with the Major Professor; see program Handbook for internship information.

**Other Requirements.** In addition to course and credit hour requirements, students are required to:

1. Form a Steering Committee of the Major Professor and one additional faculty member before undertaking the Synthesis requirement.

2. File a Form 3B (Academic Plan), attaching a program Plan Sheet, with the Office of Instruction and Graduate Studies (227 Bray) by the end of the second semester of full-time study.

3. Offer a Capstone Seminar, reporting either on planned or completed Synthesis activity.

Note: No Comprehensive Examination is required.
APPENDIX B.1
INTERNSHIP REQUIREMENTS

INTRODUCTION

These standards are established to ensure some measure of consistency in the work experience, workload, and performance of Master of Professional Studies degree candidates who elect to complete an internship as partial fulfillment of their degree requirements. They also establish the responsibilities of GPES, the major professor, the sponsor, and the student’s steering committee in establishing, monitoring and evaluating the internship.

1. STANDARDS/REQUIREMENTS

a) The purpose of the internship is to provide an integrative capstone experience. The internship should include an opportunity for the student to exercise individual responsibility and to demonstrate capability. Joint or individual assignments resulting in written reports are extremely desirable.

b) Internships generally earn six credit hours (6) in the GPES program. Additional credit hours may be earned (12 maximum) in exceptional cases. Total credit hours required for graduation under the internship option are 42 hours, 15 hours are required courses; 15 hours for a study area; and six hours for make up or enrichment, in addition to internship credit hours.

c) The internship experience shall be for a minimum of 30 hours/week, for 14 weeks. Typically the internship should be completed in a single semester. A steering committee may approve an earlier internship if the core and at least 3 directly related areas of study courses have been completed.

d) An internship can not be undertaken at the place of regular employment of the student.

e) The internship is ordinarily undertaken at the conclusion of the coursework in the student’s program.

f) The purpose of these requirements is to insure a high quality internship. They are not designed to unduly restrict internship arrangements nor to introduce rigidity into the program. It is recognized that at times exceptions to these requirements may be desirable because of special circumstances. Exceptions may be requested through the petition process and will be given favorable consideration providing the objective of a high quality internship is assured by the major professor and the student.

g) It is desirable, but not required, that the internship be on a paid basis, this insures that all parties are committed to the effort. Inquires should be made to the Curriculum Coordinator for possible sources of financial aid if the sponsor provides no salary.

2. INTERNSHIP PLAN

The student must prepare an internship plan and have it approved by his/her steering committee prior to beginning the internship.
3. MEMORANDUM OF AGREEMENT

a) A memorandum of agreement must be executed by the student, the sponsor, the major professor and the Chair of Environmental Studies, before the internship begins. The sponsor may require some additional form of agreement. The original goes to GPES file with copies to the sponsor, major professor, steering committee and student.

b) The student must be assigned tasks appropriate for entry grade employees at the Masters degree level. The internship should provide detailed experience in the field chosen by the student and agreed to by the student's major professor, committee and employer. Importantly, completion of degree requirements is not based on having a job, but rather on the learning experience gained through the internship.

c) The memorandum of agreement is not a formal contract, rather it is a communication device to insure that all parties understand what's expected of them.

d) Any major change(s) from the conditions of the original memorandum of agreement will require the filing of an amended agreement with the appropriate signatures stipulated in part 3(a).

4. MONITORING/SUPERVISION

a) At least 50% of the student's effort will be of a professional nature which relates directly to the student's program.

b) The student will have direct supervision.

c) The student will have access to documents, meetings, field trips, etc., from which he/she may articulate the broader organizational context.

d) The anticipated nature of the learning experience will be described in detail in 3b(iv) or in an addendum to the agreement, e.g., groundwater modeling, bill drafting, preparation of educational material, designing a facility, analyzing a watershed, doing research, preparing reports, etc.

e) The sponsor supervisor will oversee the student's activities. A brief written report by the supervisor on the student's work at the mid-point and end of the internship to the Major Professor would be desirable.

f) If feasible the Major Professor, the supervisor, and the student will meet before the internship commences, at the mid-point, and at the conclusion of the internship, to review the program and to insure communication and understanding between the parties.

g) The Major Professor should insure that the student has the proper background to undertake the internship.

h) A bi-weekly report should be submitted to the Major Professor by the student.
5. STUDENT REPORTING

A. Bi-Weekly Progress Reports:

The purpose of these brief (3-5 pages and attachments) professional communications are to provide an opportunity for periodic reflective processing, and to inform Committee members of progress and problems/issues. Many students find that keeping a daily log/diary is helpful both in accomplishing their work and in subsequent writing. Although not required, some systematic form of daily recording is recommended.

Bi-Weeklies are more than a laundry list of activities. They should selectively address those components of the upcoming Internship Report which includes description of the organization (early Bi-Weeklies), and critical connection to course concepts and methods (later Bi-Weeklies). For the student, a rough mock-up of the Internship Report can be assembled from the Bi-Weeklies. For the faculty, the Bi-Weeklies should provide windows of opportunity to communicate with the student, and to minimize “surprises” in the Internship Report.

6. RESPONSIBILITIES

It is the responsibility of the student to make all arrangements and to insure that all requirements are met.

The Major Professor is responsible for approving the internship program and for oversight of the student’s program including assurance that the internship is suitable and worthwhile.

The Steering Committee shall review bi-weekly reports, the draft report and make any appropriate comments and/or recommendations to the student and the Major Professor. The internship report is included as a proper examination area in the student’s comprehensive exam.

The College and ESF faculty will assist in helping the student locate an internship opportunity and identifying possible sources of aid.
APPENDIX B.2
INTERNERSHIP AGREEMENT

MEMORANDUM OF AGREEMENT

The memorandum of agreement is not a formal contract, rather it is a communication device to
insure that all parties understand what is expected of them.

The parties to this agreement, entered into on the ___day of ______,______, are identified as follows:

SPONSOR: State University of New York
            College of Environmental Science and Forestry
            Syracuse, NY 13210

MAJOR PROFESSOR:
Name
Address
Telephone Number

HOST:
Name
Address
Telephone Number

SUPERVISOR:
Name
Address
Telephone Number

STUDENT:
Name
Address
Telephone Number
The parties agree as follows:

1. The approximate duration of the assignment is beginning on ________________ and ending on ________________

2. The Student's work schedule will be:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3. The Student's work location will be:

Name

Address

Telephone Number

4. The Student assigned by the Sponsor to the Host shall be administratively responsible to the Host.

5. The Student's duties and responsibilities will include:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

-29-

7. Final Product(s) (reports, presentations, slide shows, etc.) expected and due date(s):

BIWEEKLIES:

INTERNERSHIP DRAFT:

8. The Host:

A. Will be responsible for the student's employment, separation, fixing of hours of work, and other similar items associated with an employer-employee relationship.

B. Shall provide:
   (1) Technical direction and supervision.
   (2) Office space, supplies, equipment, and other working tools and facilities necessary for the performance of the student's assignments, if not otherwise provided.
   (3) Transportation of student from Host headquarters to work stations in the field.

C. Will report to the Sponsor, as required, the time and the work accomplishments of the students.

Report Schedule:

D. Will provide the student access to documents, meetings, field trips, etc., from which the student may articulate the broader organizational context.

E. Will not make a cash contribution to the Sponsor.

9. The Student shall meet Host standards as to qualifications to utilize facilities and operate its equipment. Host shall be the sole judge of the qualifications of the Student in this respect.
10. The Sponsor, on request of the Host, will reassign or terminate the assignment of student provided by the Sponsor.

11. The Major Professor will:

   A. Approve the internship and oversee the student’s progress.

   B. Visit student intern on site (if location allows).

12. This agreement may be amended by mutual agreement of the parties hereto.

13. ESF - Environmental Studies Internship policy and requirements statements is included in this agreement by reference and is attached hereto.

14. Additional points:

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<tr>
<th>FACULTY CHAIR</th>
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<tr>
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<table>
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</table>

<table>
<thead>
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<th>MAJOR PROFESSOR</th>
<th>DATE</th>
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</table>

<table>
<thead>
<tr>
<th>STEERING COMMITTEE MEMBER</th>
<th>DATE</th>
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<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DATE</th>
</tr>
</thead>
</table>

7/2007
APPENDIX B.3
GUIDELINES FOR INTERNSHIP REPORTING

A professional internship provides the student with an integrative experience which allows the student to apply the knowledge and techniques learned from course work in the analysis and decision making for an environmental problem, issue or situation. The institutional setting, the mission, ethic and practice of the organization will have a profound impact on the methods used in approaching and resolving issues. Furthermore in order to demonstrate the integrative nature of the experience the student must have substantial responsibility for production of a work product(s) that illustrates the technical and social integration required in assessing issues and problems and posing solutions or remedial action.

The College requirement for the internship is a professional report prepared in accordance with College standards. ESF Graduate Academic Policies require that:

"The student must prepare a report satisfactory to the steering committee. The student's report on the academic or professional experience, prepared and bound according to College standards, will be maintained by the individual Faculty." Source: Office of Instruction and Graduate Studies, "Instructions for the Preparation of Theses, Projects and Reports".

The Faculty of Environmental Studies further requires that the report format must meet Faculty requirements, as detailed in this Handbook.

1. A rough draft of the report must be submitted to the Major Professor by the end of the semester in which the internship credit hours are taken in order to receive an "S".

2. The general style manual for College reports is:


   Faculties may opt to use a style manual which is more discipline-oriented, and in doing so, accept the responsibility to communicate this preference along with any other special requirements to graduate students. The student's responsibility is to be aware of the style manual and any special requirements of his/her Faculty. In any case, the manual to be used should be indicated as part of the report plan, i.e., the student in consultation with the major professor should identify which style manual will be followed in preparing the report.
3. Generally, internship reports should observe the following organization:

Title Page
Acknowledgments
Table of Contents
List of Tables
List of Figures
Summary with Key Words (format included here)
Introduction
Body of Text
References
Appendices
Vita (format included here)

Alternatives to this organization may be authorized by the steering committee within any guidelines developed by the individual Faculties.

4. The body of the report shall have five sections:

a. A comprehensive description of the organization of the internship institution from the perspectives of the core courses, reflecting studies of institutions, public participation, and decision making.

b. A summary of the major actual work conducted.

c. A critical comparison of the methods and processes used in relation to relevant concepts and approaches from the student's academic program.

d. Any completed work products or supporting materials to be included in the body of the report or as appendices.

e. Selected references.

5. Production of the final report must follow College guidelines:

a. Margins: left binding edge:1-1/2"
right edge:1"
top and bottom:1-1/4"

b. Duplication of report: copies must be clear, neat, and easily read. Paper used must be of good quality, 16# or 20# bond.

c. Binding of report: prior to graduation, one (1) signed copy must be turned in to the Office of Instruction and Graduate Studies. After binding, it will be distributed to the appropriate Faculty office. The student may order (and pay for) as many bound copies as desired for personal use.
FORMAT FOR VITA

NAME:
DATE AND PLACE OF BIRTH:
EDUCATION:

<table>
<thead>
<tr>
<th>NAME AND LOCATION</th>
<th>DATES</th>
<th>DEGREE</th>
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</table>

HIGH SCHOOL:

COLLEGE:

EMPLOYMENT:

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<th>DATES</th>
<th>POSITION</th>
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</thead>
</table>

7/2007
APPENDIX C
FUNCTIONS OF STUDY AREAS

The area-of-study (AOS) is configured as the critical lynchpin between the program as a whole, and the major professor. The intent is that the AOS will become a time-efficient vehicle for conducting the business of academe, and provide informal arenas for faculty-faculty, faculty-student, and student-student interchange.

Listed below are some of the functions and opportunities for AOS's:

COMPOSITION

- Recommend to the Chair colleagues for addition to the AOS' major professor roster.
- Ditto (annually) for Adjunct Faculty.

STUDENT BODY

- Counsel prospective applicants.
- Make admission decisions.
- Include a student representative on the subcommittee.
- Once each semester hold an open session with all students invited.

CURRICULA

- Write catalog description of AOS.
- Maintain advising lists of courses which satisfy program objectives.

RESOURCES

- Make recommendations regarding space, facilities, library resources, and computing.
Staff:

PATRICIA A. GIBEAULT (Pat)
107 Marshall Hall, 470-6528
Secretary for Graduate Program/Receptionist

PATRICIA L. KIELECKI (Patty)
106 Marshall Hall, 470-6636
Secretary for Chair/Undergraduate Program

Faculty:

RICHARD C. SMARDON
(Wetland Assessment, Public Participation, Decision Making).
106 Marshall Hall, 470-6576

JANINE M. DEBAISE (Ecofeminism, Creative Writing).
105 Moon Library, 470-4776

JOHN P. FELLEMAN (Environmental Decision Making, Information Policy).
108B Marshall Hall, 470-6550

303 Illick Hall, 470-4741

PATRICK J. LAWLER (Environmental Communication).
13C Moon Library, 470-6914

JACK P. MANNO (Sustainable Development, Ecological Economics, Great Lakes Policy).
24 Bray Hall, 470-6720

MARK S. MEISNER (Environmental Discourse and Communication).
112 Marshall Hall, 470-6908

SHARON D. MORAN (Environmental Policy, Government and Water Resources).
113 Marshall Hall, 470-6990

BRENDA J. NORDENSTAM (Risk Perception and Analysis).
108A Marshall Hall, 470-6573

SUSAN L. SENECAH (Environmental Communication and Policy).
109 Marshall Hall, 470-6570

BENETTE A. WHITMORE (Composition-Technical Writing and Communication).
105 Moon Library, 470-6722
Participating Faculty:

EMANUEL J. CARTER  
312 Marshall Hall, 470-6665  
(City Planning, Urban Design, Rural Development, Design History and Theory).

ELEN M. DEMING  
310 Marshall Hall, 470-6556  
(Landscape History and Design).

CHERYL S. DOBLE  
322 Marshall, 470-6553  
(Community Design and Planning: Public Participation in Decision Making Process; Rural Planning and Land Use Management).

THEODORE A. ENDRENY  
207 Marshall Hall, 470-6565  
(Watershed Modeling).

CHARLES A. HALL  
354 Illick Hall, 470-6812  
(Systems Ecology).

DAVID L. JOHNSON  
419 Jahn Lab, 470-6829  
(Particle Analysis, Analytical Methods, Heavy Metals).

CHARLES N. KROLL  
309 Bray Hall, 470-6825  
(Decision Analysis).

DIANE M. KUEHN  
211A Marshall Hall, 470-6561  
(Recreation Management and Research).

LAURA K. LAUTZ  
206 Bray Hall, 470-4765  
(Hydrology and Watershed Management).

KARIN E. LIMBURG  
249 Illick Hall, 470-6741  
(Limnology, Watershed Ecology).

VALERIE A. LUZADIS  
307 Bray Hall, 470-6693  
(Natural Resource Economics).

MYRON J. MITCHELL  
210 Illick Hall, 470-6765  
(Biogeochemistry of Forest and Aquatic Ecosystems; Decomposition Processes; Stable Isotopes).
TSUTOMU NAKATSUGAWA
110 Illick Hall, 470-6767
(Toxicology, Insect and Vertebrate Toxicology, Microbiology).

RUDOLPH M. SCHUSTER
210 Marshall Hall, 470-4863
(Ecological and Recreational Planning).

S. SCOTT SHANNON
323 Marshall Hall, 470-6537
(Community Design and Planning; Rural, Traditional, and Neo-Traditional Community Form; Historic Landscape Preservation; Computer Applications and Design Simulation).

JOHN STELLA
206 Marshall Hall, 470-4902
(Watershed Science and Management, Stream Ecology).

JOHN E. WAGNER
304 Bray Hall, 470-6971
Adjunct Faculty:

**JERROLD ABRAHAM**  
SUNY Health Science Center, Director of Environmental and Occupational Pathology, 750 East Adams Street, Syracuse NY 13210 (Public Health).

**STEVE BRECHIN**  
Syracuse University, Maxwell School of Public Policy, Anthropology, Room 209 Maxwell Hall, Syracuse, NY 13210, 443-2200 (Natural Resources Sociology).

**DAVID DRIESEN**  
Syracuse University, Law College, 446 College of Law, Syracuse, NY 13210, 443-4218 (Environmental Law).

**PATRICK DURKIN**  
5100 Highbridge Street, Apt 30A, Fayetteville, NY 13066, 637-9560 (Chemical Risk Assessment and Documentation).

**STEVEN EFFLER**  
110 Hillsboro Parkway, Syracuse, NY 13214, 466-1309 (Water Quality Modeling).

**MARLA EMERY**  
U.S. Forest Service, S. Burlington, VT, (Non-Commodity Forestry, Traditional Environmental Knowledge).

**JOHN FERRANTE**  
Department of Environmental Conservation, Division of Water, 615 Erie Boulevard West, Syracuse, NY 13204, 426-7507 (Watershed Ecology).

**RICHARD GOLDSMITH**  
Syracuse University, Law College, 446 College of Law, Syracuse, NY 13210, 443-2533 (Environmental Law).

**MARLA JABBOUR**  
SUNY/ESF, Assistant Dean, Instruction and Graduate Studies, Director of Honors Program, 227 Bray Hall, Syracuse, NY 13210, 470-6595 (Environmental History).

**JOHN KUSLER**  

**DAVID NOWAK**  
SUNY/ESF, USDA Forest Service, 5 Moon Library, Syracuse, NY, 13210, 448-3212 (Research Forester).

**SAMUEL SAGE**  
Atlantic States Legal Foundation, 658 W. Onondaga Street, Syracuse, NY 13204, 475-1170 (Community Building).

**LISA WARHECKE**  
256 Greenwood Place, Syracuse, NY, 13210, 428-6024 (Geographic Information Systems and Public Administration).