Agroecology
Graduate Student Handbook

AGROECOLOGY AT UF
BALANCING PRODUCTION
ENVIRONMENT • SOCIETY

For UF IFAS Agronomy Majors
M.S. Agroecology Concentration
And a supplement for students in the Ph.D. Concentration,
Global Systems Agroecology

http://UF-Agroecology.com
Agronomy Department http://agronomy.ifas.ufl.edu
Updated for Spring 2017 Orientation
This Graduate Student Handbook is specific to UF IFAS Agronomy Majors with the Agroecology Concentration. It is used as the primary syllabus at orientation.

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Program of Study

1. Non-thesis

Program of Study for Master of Science, Non-Thesis Degree
AGRONOMY major with AGROECOLOGY concentration

Proposed program of study for Name: UFID:
Major: Agronomy (AY)
15 credits minimum in the major are required for the 30 credits needed in the degree

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Year and Semester</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALS 5155</td>
<td>Global Agroecosystems</td>
<td>3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>AGR 5511</td>
<td>Crop Ecology</td>
<td>3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>AGR 5444 or</td>
<td>Ecophysiology of Crops or</td>
<td>3</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>AGR 6422</td>
<td>Environmental Crop Nutrition</td>
<td></td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>AGR 6933</td>
<td>Graduate Agronomy Seminar</td>
<td>1</td>
<td>Fall or Spr</td>
<td></td>
</tr>
<tr>
<td>AGR 6905</td>
<td>Special Topics</td>
<td>2</td>
<td>any</td>
<td></td>
</tr>
<tr>
<td>AGR 5230C (possible elective)</td>
<td>Florida Grassland Agroecosystems</td>
<td>4</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>IPM 5305 (possible elective)</td>
<td>Principles of Pesticide</td>
<td>3</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>PLS 5632C (possible elective)</td>
<td>Integrated Weed Management</td>
<td>3</td>
<td>Fall even years</td>
<td></td>
</tr>
</tbody>
</table>

Select at least one elective or ALS course

- AGR course:
  - Foundation and Supporting Courses
    - SWS 5050: Soils Environmental Professionals
    - SWS 5246 or SWS 5208: Sustainable Agr. & Urban Land Management
    - STA 6166 or ALS 5932: Statistical Methods in Research I or Intro to Applied Statistics
    - ALS 5934 or AGG 5607: Communicating in Academia
    - Contact SWS dept for registration
    - Graduate Prof Dev. Seminar (currently graded S/U) or Communicating in Academia
    - Beneficial to take either early in program
    - Various

Totals Hours Required for the MS degree: 30

The departmental requirement for taking one course from each of the three core areas (genetics and plant breeding; plant physiology and biochemistry; plant ecology or management or nutrition) is waived for Agroecology students.

Approval/Signatures – Below the signature lines, type in the appropriate name

____________________________________  ______________________________________
Student: UF Agronomy Faculty Chair Name

____________________________________  ______________________________________
UF Soil Water Science Faculty Member Name

____________________________________
UF Faculty or Special Member Name

Graduate Coordinator Review date/approval: __________

*Please note this is a template for the course requirements for the Agroecology concentration. For questions please contact Cynthia Hight chight@ufl.edu
Proposed program of study for Name: UFID:

Major: Agronomy (AY)
12 credits minimum in coursework of the major plus 3-6 credits thesis research

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Year and Semester</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALS 5155</td>
<td>Global Agroecosystems</td>
<td>3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>AGR 5511</td>
<td>Crop Ecology</td>
<td>3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>AGR 5444 or AGR 6422</td>
<td>Ecophysiology of Crops or Environmental Crop Nutrition</td>
<td>3</td>
<td>Spring Fall</td>
<td></td>
</tr>
<tr>
<td>AGR 6933</td>
<td>Graduate Agronomy (Exit) Seminar</td>
<td>1</td>
<td>Fall or Spr</td>
<td></td>
</tr>
<tr>
<td>AGR 6971</td>
<td>Master’s Research (take as needed, up to 6 credits to contribute to MS degree.)</td>
<td>Up to 6*</td>
<td>any</td>
<td></td>
</tr>
</tbody>
</table>

SELECT AT LEAST ONE ELECTIVE

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Year and Semester</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 5230C</td>
<td>Florida Grassland Agroecosystems</td>
<td>4</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>IPM 5305</td>
<td>Principles of Pesticide</td>
<td>3</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>PLS 5632C</td>
<td>Integrated Weed Management</td>
<td>3</td>
<td>Fall even years</td>
<td></td>
</tr>
<tr>
<td>Other AGR course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Foundation and Supporting Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Year and Semester</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWS 5050</td>
<td>Soils Environmental Professionals</td>
<td>3</td>
<td>Fall or Spring</td>
<td></td>
</tr>
<tr>
<td>SWS 5246 or SWS 5208</td>
<td>Water Sustainability or Sustainable Agr. &amp; Urban Land Management</td>
<td>3</td>
<td>Spring Odd Fall</td>
<td></td>
</tr>
<tr>
<td>STA 6166 or ALS 5932</td>
<td>Statistical Methods in Research I or Intro to Applied Statistics (ALS 5932 contributes to AY major)</td>
<td>3</td>
<td>Fall or Spr Fall or Spr</td>
<td></td>
</tr>
<tr>
<td>ALS 5934</td>
<td>Graduate Prof. Dev. Seminar (currently graded S/U) or Communicating in Academia Beneficial to take early in program</td>
<td>2 or 3</td>
<td>Fall or Spring</td>
<td>S/U</td>
</tr>
<tr>
<td>Non AGR Elective or thesis research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Totals Hours Required for the MS degree: 30
Of the 30 credits, 6 may be AGR 6971 Master’s Research.

The departmental requirement for taking one course from each of the three core areas (genetics and plant breeding; plant physiology and biochemistry; plant ecology or management or nutrition) is waived for Agroecology students.

Approval/Signatures – Below the signature lines, type in the appropriate name

______________________________________  ______________________________________
Student:                                  UF Agronomy Faculty Chair Name

______________________________________  ______________________________________
UF Soil Water Science Faculty Member Name

______________________________________  ______________________________________
UF Agronomy Dept. Member (assigned)

______________________________________  ______________________________________
UF Faculty or Special Member Name

*This template is specific to the Agroecology concentration. For questions please contact Cynthia Hight chight@ufl.edu

Graduate Coordinator Review date/approval: __________________
Agroecology Course Requirements

1. Non-thesis

Course Requirements for M.S. Non-thesis Students
to Complete the Agroecology Concentration in Agronomy

All M.S. non-thesis students pursuing a concentration in Agroecology are required to fulfill all graduate school, departmental and supervisory committee requirements.

Fifteen letter graded credit hours in the major are required for students pursuing a M.S. non-thesis degree with a concentration of courses in Agroecology. Below is the list of courses which must be completed:

- ALS 5155 Global Agroecosystems (3 cr. hours)
- AGR 5511 Crop Ecology (3 cr. hours)
- AGR 5444 Ecophysiology of Crops or AGR 6422 Environmental Crop Nutrition (3 cr. hours)
- ALS 5934 Graduate Professional Development (2 cr. hours) or AGG 5607 Communicating in Academia (3 cr. hours); NOTE: Previous students recommend taking this course early in your program.
- AGR 6933 Agronomy Graduate Seminar (1 cr. hour) – see guidelines on Pages 14 and 15
- AGR 6905 Special Topics (2 cr. hours) – taken during final semester
- SWS 5050 Soils for Environmental Professionals (3 cr. hours)
- SWS 5246 Water Sustainability or SWS 5208 Sustainable Agriculture & Urban Land Management (3 cr. hours)
- STA 6166 Statistical Methods in Research I or ALS 5932 Introduction to Applied Statistics (3 cr. hours) Prerequisite for either: STA 2023 Intro to Statistics. NOTE: ALS 5932 contributes to the AY major. “R” programming is taught in this course concurrent with application.
- Elective from AGR* or other department (6 cr. hours)

Note: The departmental requirement for taking one course from each of the three core areas (genetics and plant breeding; plant physiology and biochemistry; plant ecology or management or nutrition) is waived for Agroecology students.

*If 15 letter graded credits under the major is not fulfilled, a petition to the Graduate School is necessary prior to the student’s final term. Submission of petition does not guarantee approval.
2. Thesis

Course Requirements for M.S. Thesis Students Who Wish to Complete the Agroecology Concentration in Agronomy

All M.S. thesis students pursuing a concentration in Agroecology are required to fulfill all graduate school, departmental and supervisory committee requirements.

Twelve letter graded credit hours in the major are required for students pursuing a M.S. thesis degree with a concentration of courses in Agroecology. Below is the list of courses which must be completed:

- ALS 5155 Global Agroecosystems (3 cr. hours)
- AGR 5511 Crop Ecology (3 cr. hours)
- AGR 5444 Ecophysiology of Crops or AGR 6422 Environmental Crop Nutrition (3 cr. hours)
- ALS 5934 Graduate Professional Development (2 cr. hours) or AGG 5607 Communicating in Academia (3 cr. hours); **NOTE:** Previous students recommend taking this course early in your program.
- AGR 6933 Agronomy Graduate Seminar (1 cr. hour)
- SWS 5050 Soils for Environmental Professionals (3 cr. hours)
- SWS 5246 Water Sustainability or SWS 5208 Sustainable Agriculture & Urban Land Management (3 cr. hours)
- STA 6166 Statistical Methods in Research I or ALS 5932 Introduction to Applied Statistics (3 cr. hours) **Prerequisite for either: STA 2023 Intro to Statistics.** **NOTE:** ALS 5932 contributes to the AY major. “R” programming is taught in this course concurrent with application.
- Elective from AGR* or other department (3 cr. hours)
- AGR 6971 Research for Master’s Thesis (up to 6 cr. hours can be counted towards the degree.)

The UF Graduate School has a “Final Term” minimum registration of 3 credits (fall or spring) or 2 credits (summer C) registration.

**Note:** The departmental requirement for taking one course from each of the three core areas (genetics and plant breeding; plant physiology and biochemistry; plant ecology or management or nutrition) is waived for Agroecology students.

* If the requirement for 12 letter graded credits under the major is not fulfilled, a petition to the Graduate School is necessary prior to the student’s final term. **Petition submission does not guarantee approval.**

For registration questions, contact Agronomy’s Academic Program Assistant: chight@ufl.edu
Student Evaluations – After the first term and thereafter, every Spring

1. Non-thesis

AGROECOLOGY MS NON-THESIS STUDENT EVALUATION

Name: ________________ UF ID: _____________

Evaluation Period (Semesters): ________________

<table>
<thead>
<tr>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>N/A</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student proficiency in coursework</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Adheres to departmental and University requirements regarding deadlines for submission of forms related to course registration and academic progress</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Student progress on special project required for the degree</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Student progress towards the degree</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Communication with faculty advisor and supervisory committee</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Student feedback/attendance on departmental seminar</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Overall student performance</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Other Achievements:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory Committee formed</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Program of study - Form 2 finalized</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Coursework for concentration completed</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Coursework for major completed</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
</tbody>
</table>

Supervisory Committee Name: Supervisory Committee Signatures: Date:

Chair:

Soil Water Science Member:

Member:

Additional room for comments on the back of this form. The signature of the graduate student does not mean that he/she agrees with the evaluation, but means only that he/she has seen the evaluation.

Student’s Signature: ___________________________ Date: ______________________

Return completed/signed form to Cynthia Hight chight@ufl.edu
### 2. Thesis

**AGROECOLOGY M.S. THESIS STUDENT EVALUATION**

Name: ________________  UF ID: ________________

Begin Date: ________________  End Date: ________________

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student proficiency in classroom academics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student awareness of current literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student proficiency in conducting research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completes graduate assistant duties on a timely basis, to include compliance with work schedule established by supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomplishes thesis research in a scientific and innovative manner with minimal supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completes other research responsibilities assigned by supervisor on a timely basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adheres to departmental and University requirements regarding deadlines for submission of forms related to course registration and academic progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Employment performance as a graduate assistant, if applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Academic performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Supervisory Committee Name**  **Supervisory Committee Signatures**  **Date**

Chair:

Soil Water Science Member:

Member:

**Agronomy Dept. Member (assigned to committee):**

Additional room for comments on the back of this form. The signature of the graduate student does not mean that he/she agrees with the evaluation, but means only that he/she has seen the evaluation.

Student’s Signature: _____________________________  Date: ______________________

*Return completed/signed form to Cynthia Hight chight@ufl.edu*
Graduate admission and application procedure
http://uf-agroecology.com/students/admissions/

Course Schedule for M.S. Agroecology Concentration
http://uf-agroecology.com/students/suggested-course-study/

Partner Institutions for Ph.D. Global Systems Agroecology Concentration
http://uf-agroecology.com/what-is-agroecology/partner-institutions/

Syllabi of courses offered in Agronomy
http://agronomy.ifas.ufl.edu/students/#gradcourses

Agroecology Orientation

*General Information:*
http://uf-agroecology.com/students/orientation/

*Rebroadcast on You Tube:*
https://www.youtube.com/watch?v=f7BTDf8kiiI
Campus student are required to attend face-to-face orientations

Graduate Offerings (Concentrations and Certificates)

http://uf-agroecology.com/programs-offered/

- Sustainable Agroecosystems Certificate
- Global Agroecosystems Certificate
Supervisory Committee

- M.S. non-thesis students will be required to form a Supervisory Committee composed of a minimum of three members, including at least one faculty from Agronomy Department, one faculty from the Soil and Water Science Department, plus a third member (either UF faculty or a “Special Member). This is done in consultation with the Graduate Advisor.
- M.S. thesis students will be required to form a Supervisory Committee composed of a minimum of four faculty members, including at least two from the Agronomy Department and one from the Soil and Water Science Department. This is done in consultation with the Graduate Advisor.
- The committee needs to be formed by the end of the student’s first term.
- The Graduate Advisor completes an annual academic evaluation for each student and the student presents it to his/her Supervisory Committee for review and authorization.
- The Graduate Advisor is also responsible to collect and evaluate weekly seminar evaluations from their non-thesis student during the one semester for which the student is registered for AGR 6933 (Agronomy Graduate Seminar). The instructor will assign a course grade based on the completion and quality of these evaluations. Thesis students will register for AGR 6933 (Agronomy Seminar) and will present the results of their thesis research to the department. (This course, AGR 6933, is offered each fall and spring terms. For student projecting a summer graduation, seminar must be taken in the preceding spring term.)
- The M.S. non-thesis student Supervisory Committee is responsible for approval of course work and provides guidance and review of the student’s professional development and special topic project. They are also responsible for conducting the final exam. The exact structure of this exam can be determined by the Supervisory Committee. At minimum, it should consist of a written and oral presentation of the special project. Performance on these components forms the basis for the student grade in AGR 6905. The Supervisory Committee may choose to include as part of the final exam written and/or oral questions designed to test the student’s core competency. The student’s performance in aggregate
for the activities included in the final exam provides the basis for deciding on a passing/failing performance on the exam.

- The M.S. thesis student Supervisory Committee is responsible for approval of the course work and research project, and they provide guidance and review of the student’s professional development. The Supervisory Committee is responsible for conducting the final exam. The final exam for M.S. thesis students in Agroecology is a thesis defense and is similar to the thesis defense for other Agronomy graduate programs.

**Committee Appointment Worksheet – Agroecology Concentration**

*Agronomy Department Graduate Students need to have a Supervisory Committee appointed by the end of the first term or after 12 credit hours*

Student: ___________________________ UFID: _______________

Degree: Master of Science (select: Thesis or Non-Thesis)

First Term/Date: ___________________________ Project Term of Completion: _____________

**Committee Members for Agroecology Concentration**

Chair from Agronomy Department: ___________________________

Soil Water Science Department Member: ___________________________

UF Faculty or Special Member: ___________________________

Agronomy Department Assigned Member: ___________________________

(Thesis only)

Graduate Students should list faculty who have agreed to serve on his/her Supervisory Committee and email to the Agronomy Graduate Coordinator, Dr. Lynn Sollenberger, at lesollen@ufl.edu for approval before obtaining committee signatures on the program of study or evaluation forms. Once your supervisory committee has been approved, your committee will be inserted into the UF Graduate School data base (GIMS).

*Email committee list to lesollen@ufl.edu*
M.S. Non-Thesis Project for AGR 6905 Agroecology Students

A project with a major paper and oral presentation to the Supervisory Committee is required for the M.S non-thesis degree with a concentration in Agroecology. The project represents work sufficient for 2 credits of AGR 6905. For the major paper, a student must demonstrate knowledge and understanding of any topic in disciplines emphasizing Agroecology and sustainability. The project involves the analysis and synthesis of the identified topic, the gathering of any additional data or information related to the topic, and then summarization of the work in the major paper and oral presentation. The project may or may not involve original research activities and must be approved by the supervisory committee. It is expected that the background literature will be researched as a basis for the project. This literature background should be included in the major paper along with the critical interpretation of scientific findings with proper analysis of datasets using statistical methods, when applicable and appropriate. The paper may report on independent analyses of published data sets such as would be done in a meta-analysis.

The student works independently with advice from the supervisory committee to implement the project and completion of the major paper consisting of the following sections: (i) Abstract; (ii) Introduction -Significance and Rationale (Problem Statement) along with review of literature; (iii) Objectives (and Hypotheses); (iv) Methodology (Study Area, Description of Data and Methods); (v) Results; (vi) Discussion; (vii) Conclusions; and (viii) References. The major paper is on average 30-50 pages including figures and tables; plus references (Format: double line spacing). However, in some instances the paper can be substantially longer.

Some examples of major paper topics are as follows:

a. Development and analysis of an agroecological teaching module for middle schools.
b. Development of an extension program based on training producers for precision application of fertilizer.
c. Review and interpretation of African agroecosystems and changing paradigms in these systems leading to greater food security.
d. Implementation and analysis of soil moisture technologies for conserving water on a south FL blueberry farm.
e. Case studies on pest management in organic systems.
Expected timeline for completion of Major Paper:

<table>
<thead>
<tr>
<th>Deadline</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st semester</strong></td>
<td>Discussion with major advisor about relevant topics of interest; selection of project title and agreement with advisor and committee members about the title</td>
</tr>
<tr>
<td><strong>Upon completion of 15 credit hours of Agroecology course curriculum</strong></td>
<td>Submit two to three page project outline to Graduate Advisor and Supervisory Committee with focus on the objectives and methodology that will be used</td>
</tr>
<tr>
<td><strong>Before AGR 6905 course registration</strong></td>
<td>Rough draft of the paper needs to be submitted to Graduate Advisor</td>
</tr>
<tr>
<td><strong>Early part of the final semester</strong></td>
<td>During the final semester, when registered for AGR 6905, project completion and final submission to the Graduate Advisor and Supervisory Committee will occur*</td>
</tr>
</tbody>
</table>

* Note: the grade for AGR 6905 will be based on the quality of the written project (edited by the Graduate Advisor and presented to the Supervisory Committee at least two weeks before the final exam) and the oral presentation of the project (presented to the Supervisory Committee at the final exam).

Example timeline if non-thesis degree is completed in two years:

| First Term | • Take 2 Courses  
|            | • Develop Program of Study (POS); Discuss Project with Chair; Recruit Committee and meet to discuss project and collect POS signatures |
| Second Term | • Take 2 Courses  
|            | • First term evaluation based on previous term's grades and goals  
|            | • Committee Meeting and Evaluation if applicable |
| Summer Terms | • Find elective course or lapse summer registration  
|            | • Work independently on project  
|            | • Committee meeting to Present Outline of Project Objectives and Methodology |
| Final Term | • Register in AGR 6933 and AGR 6905 and Apply to Graduate  
|            | • Take written final exam on Agroecology core courses and/or topics related to the final project  
|            | • Present final project as a seminar to Committee in a final oral exam |
Agroecology Seminar Policy

Agroecology students are expected to attend (on-campus students) or view (distance education students) all Agronomy seminar presentations each fall and spring semester. The link for distance education students to access these presentations in Fall 2016 term is: https://mediasite.video.ufl.edu/Mediasite/Catalog/Full/aa215a2a0ead426c89a7c351310a6a7821

The introduction on the re-broadcast will reference a handout for participants with physical presence to a complete and turn in immediately following the Exit Seminar so that the presenter has the benefit of peer review. The handout is different from the evaluation form on the following page. Use the instructions below as your guide to satisfy departmental requirements.

The seminar schedule will be available prior to the first seminar.

Non-thesis Agroecology students will register for Agronomy Graduate Seminar (AGR 6933; 1 credit) once during their program. During this semester, students are required to view each seminar and submit the seminar evaluation sheet for each seminar to their major advisor. Completion and quality of the seminar evaluations will form the basis for the grade in AGR 6933. The seminar evaluation form is provided on the following page and in the graduate student handbook.

Thesis Agroecology students will register for Agronomy Seminar (AGR 6933; 1 credit) during their last semester in the program. They will present the results of their thesis research to the departmental seminar during that semester (in person or by video conference). During this semester, students who are not resident in Gainesville are required to view each seminar and submit the seminar evaluation sheet for each seminar to their major advisor. Completion and quality of the seminar evaluations and their seminar presentation will form the basis for the grade in AGR 6933.

For questions about compliance and monitoring of participation, contact chight@ufl.edu
SEMINAR EVALUATION SHEET

Your Name:                                                         Your Signature:

Name of presenter:   Date of presentation:

The following are to be rated on a scale of 1 to 5, with 1 being poor and 5 being excellent.

____  Clear and concise title
____  Clear and concise introduction to the topic addressed
____  Research problem, hypotheses, and objectives clearly presented
____  Experimental approaches clearly explained
____  Data and their implications clearly presented
____  Conclusions clearly presented
____  Logical and understandable organization

Comments: Please state the main objective of the research as you understood it from the presentation. Then list and comment on one strength and one weakness of the project approach.

Objective:                                                                

Strength:                                                                

Weakness:                                                                

In term of AGR 6933 registration, submit completed form for each seminar to your committee chair prior to the end of the term.
**Core Curriculum Courses**

(3 credit hours each)

- ALS 5155 Global Agroecosystems
- AGR 5111 Crop Ecology
- AGR 5444 Ecophysiology of Crops
- SWS 5050 Soils for Environmental Prof.
- SWS 5246 Water Sustainability
- AGR 6233 Tropical Grasslands Agroeco.

**Electives**

- Social Science and Economics
- Modelling
- Ecology

*Those offered admission will be given the list of approved elective courses, and will chose one from each of the categories above for a total of 9-10 credit hours.*

**Research at Partner Institution**

AGR 6905 (3 credits)

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**Partner Institution information at this link:**
http://uf-agroecology.com/what-is-agroecology/partner-institutions/

*Ph.D. students should reference the Agronomy Department Graduate Student Handbook for details on requirements of Agronomy Department requirements and deadlines to include:*

**Supervisory Committee Appointment Process**

**Program of Study Process**

**Annual Evaluations**

**UF Editorial Compliance/Degree Completion**

*Students in this concentration are exempt from the three core curriculum areas of the Agronomy major.*

**International internship (3 credits):**

All PhD students in the Agroecology concentration must have an understanding of international cropping systems. The student and committee will define the most applicable international location, depending on the specifics of each program. Each student must spend from three to six months abroad. During this time, the student can enroll in distance education classes offered by the program, as well as attend local classes offered by the international institution. Students are also expected to develop part of their research while abroad or participate in ongoing research at the host institution with resident faculty mentors.*
Global Systems Agroecology concentration

Student Name:  
UFID:  

<table>
<thead>
<tr>
<th>Course Number &amp; Title</th>
<th>Credits</th>
<th>Year &amp; Term</th>
<th>Campus or WEB</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ALS 5155 Global Agroecosystems</td>
<td>3</td>
<td>fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*AGR 5511 Crop Ecology</td>
<td>3</td>
<td>fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*AGR 5444 Ecophysiology of Crop Production</td>
<td>3</td>
<td>spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*AGR 6233 Tropical Grassland Agroecosystems</td>
<td>3</td>
<td>fall odd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWS 5050 Soils for Environmental Professionals</td>
<td>3</td>
<td>fall or spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWS 5246 Water Sustainability</td>
<td>3</td>
<td>spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester Abroad at Partner Institution dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*AGR 6905 Global Agro Intern</td>
<td>3</td>
<td>while abroad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science and Economics (e.g., FNR 6669)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modeling (e.g., ABE 5643)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecology (e.g., PCB 5338)</td>
<td>3 or 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Indicates course contributes to Agronomy Major GPA in the PhD Degree  
GPA in Concentration: ____

Social Science and Economics

FNR 6669 - Policy and Economics of Natural Resources (3 credits) (highly recommended)  
AGS 5507 - Communicating in Academia (3 credits)  
AEC 5454 - Leadership Develop. for Extension & Community Nonprofit Organizations (3 credits)  
AEC 6325 - History and Philosophy of Agricultural Education (3 credits)  
AEC 6211 – Delivering Educational Programs in Agricultural Settings (3 credits)

Modelling

NOTE: Prerequisite for modeling courses: ALS 5932 Intro to Applied Statistics or STA 6166 Statistical Methods 1 or equivalent

ABE 5643C - Biological Systems Modeling (3 credits) (highly recommended)  
ABE 5646 - Biological and Agricultural Systems Simulation (3 credits)  
ABE 5015 - Empirical Models of Crop Growth & Yield Response (3 credits)  
ABE 6254 - Simulation of Agricultural Watershed Systems (3 credits)  
ABE 6644 - Agricultural Decision Systems (3 credits)  
ABE 6933 - Crop Simulation (3 credits)

Ecology

PCB 5338 - Principles of Ecosystem Ecology (3 credits) (highly recommended)  
WIS 5496 - Research Design in Wildlife Ecology (Fall - 3 credits)  
WIS 5521 - Plant-Animal Interactions (every other year – 3 credits)  
WIS 5555C - Conservation Biology (Fall – 3 credits)  
PCB 6447C - Community Ecology (4 credits)

Research Abroad Details

Partner Institution: ________________________________  Mentor name: ________________________________  
Research Area: ________________________________  Dates Abroad: ________________________________  

GPA in Concentration: _____
Current Students, Agronomy Major

A. Non-thesis, Agroecology Concentration

<table>
<thead>
<tr>
<th>Name</th>
<th>Starting Term</th>
<th>Graduate Committee Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennifer Cletzer Miller</td>
<td>Fall 2013</td>
<td>Lynn Sollenberger</td>
</tr>
<tr>
<td>David Smiley</td>
<td>Fall 2014</td>
<td>John Erickson</td>
</tr>
<tr>
<td>Libbie Johnson</td>
<td>Fall 2014</td>
<td>Diane Rowland</td>
</tr>
<tr>
<td>Joshua Bott</td>
<td>Spring 2015</td>
<td>Lynn Sollenberger</td>
</tr>
<tr>
<td>Sumayya Allen</td>
<td>Spring 2015</td>
<td>Diane Rowland</td>
</tr>
<tr>
<td>Richard Campanale</td>
<td>Spring 2015</td>
<td>Lynn Sollenberger</td>
</tr>
<tr>
<td>Nicholas Denney</td>
<td>Spring 2015</td>
<td>Lyn Gettys</td>
</tr>
<tr>
<td>Tarver Shimek</td>
<td>Fall 2015</td>
<td>John Erickson</td>
</tr>
<tr>
<td>Lloyd Singleton</td>
<td>Fall 2015</td>
<td>Joao Vendramini</td>
</tr>
<tr>
<td>Simon Riley</td>
<td>Spring 2016</td>
<td>Greg MacDonald</td>
</tr>
<tr>
<td>Jeremy Fountain</td>
<td>Fall 2016</td>
<td>J. Mabry McCray</td>
</tr>
<tr>
<td>Wangze Yu</td>
<td>Fall 2016</td>
<td>Diane Rowland</td>
</tr>
<tr>
<td>Michael Sthreshley</td>
<td>Spring 2017</td>
<td>Lynn Sollenberger</td>
</tr>
<tr>
<td>Erin Savage</td>
<td>Spring 2017</td>
<td>Zachary Brym</td>
</tr>
</tbody>
</table>

B. Thesis, Agroecology Concentration

<table>
<thead>
<tr>
<th>Name</th>
<th>Starting Term</th>
<th>Graduate Committee Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Pearsaul</td>
<td>Fall 2014</td>
<td>Ramon Leon</td>
</tr>
<tr>
<td>Anastasia Vaccaro</td>
<td>Summer 2015</td>
<td>Diane Rowland</td>
</tr>
<tr>
<td>Pierre, Anne Krystel</td>
<td>Spring 2015</td>
<td>Mike Mulvaney</td>
</tr>
<tr>
<td>David Jaramillo</td>
<td>Spring 2016</td>
<td>Jose Dubeux</td>
</tr>
<tr>
<td>Brad Fraser</td>
<td>Summer 2016</td>
<td>Hardev Sandhu</td>
</tr>
<tr>
<td>David Hensley</td>
<td>Summer 2016</td>
<td>Diane Rowland and David Dukes</td>
</tr>
<tr>
<td>Emily Pappo</td>
<td>Spring 2017</td>
<td>Luke Flory</td>
</tr>
</tbody>
</table>

C. Doctor of Philosophy, Global Systems Agroecology Concentration

<table>
<thead>
<tr>
<th>Name</th>
<th>Starting Term</th>
<th>Graduate Committee Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erin Doughtie</td>
<td>Spring 2017</td>
<td>Diane Rowland</td>
</tr>
</tbody>
</table>
Web Links to get you started at UF for Agroecology Online

UF          www.ufl.edu (Note the convenient “Search” field in the top, right corner)
Computing Help Desk http://helpdesk.ufl.edu/ (UF email, Tech support, Thesis formatting templates)
UF Bookstore http://www.bsd.ufl.edu/g1c/bookstore/bookstore.asp (Textbooks, software)
Agroecology Handbook http://uf-agroecology.com/students/student-handbooks/

Agroecology web pages to develop a program of study and recruit a committee
Agroecology http://uf-agroecology.com
Orientation https://www.youtube.com/watch?v=f7BTDf8ktIi
Degree Req. http://agronomy.ifas.ufl.edu/agroecology/program%20of%20study.shtml
Courses http://uf-agroecology.com/students/course-listing/
Syllabi http://agronomy.ifas.ufl.edu/students/#gradcourses
Agronomy Department http://agronomy.ifas.ufl.edu
Agronomy Faculty http://agronomy.ifas.ufl.edu/faculty/
SWS Faculty http://soils.ifas.ufl.edu/personnel/faculty.shtml
SWS Courses http://soils.ifas.ufl.edu/academics/distance.shtml

Who to contact for Registration
Agronomy Use link: https://ufl.qualtrics.com/jfe/form/SV_8BKzo7N6yvHtU4B
Soil Water Sciences mjsisk@ufl.edu email for Mike Sisk (SWS5050, SWS5246, SWS5208, AGG 5607)
ALS 5934 Grad Prof Develp deeks@ufl.edu email for Dee Boyle

Syllabi links and contacts for your electives
ENY prefixes brumbaug@ufl.edu email for Ruth Brumbaugh
FOR , SUR, FAS prefixes Registration button at that unit’s web page
AEC 5206, 5454, 6300, 6552 rtrammell@ufl.edu email for Becky Trammel
HOS 5085 curtisr@ufl.edu email for Curtis Smyder

UF Graduate Catalog
Doctor of Philosophy
http://gradcatalog.ufl.edu/content.php?catoid=8&navoid=1491#Doctor_of_Philosophy
Master of Science
http://gradcatalog.ufl.edu/content.php?catoid=8&navoid=1491#Requirements_for_Master_s_Degrees
Student Spotlight

The Agroecology concentration will maintain current information on all students on the concentration’s website in a tab called “Student Spotlight”. The outline for each spotlight is as follows:

1. Student background
2. Thesis or project information
3. A quote from the student regarding a favorite component of the concentration
4. Photo of the research and/or student photo

The spotlight will be updated on a yearly basis as student information changes over the course of their degree programs.

PHOTO CONSENT

The University of Florida’s IFAS Agronomy Department uses photographs in the following media to showcase students in our major and promote our Graduate and Undergraduate offerings and research mission. The photos might be head shots, students presenting a poster, or candid. Please indicate consent for the Agronomy Department to use photographs containing your image by initialing next to the medium below.

Complete this form (and as applicable your photo and news information) for your student file to: Cynthia Hight, Agronomy Dept., Academic Program Specialist I, chight@ufl.edu

Student’s Name: ___________________________________________________________

Agroecology Research Thesis or Project area: ________________________________

UFID: ___________________ Phone Number: ________________________________

UF Email: ___________________ (UFID, phone and email are for office use only.)

Photograph Description:

UF IFAS Agronomy has my consent to use my photo for the following:

Agroecology, SWS, or Agronomy websites, such as announcements of an award you
received, news showcasing accomplishments, and profile content in “Student Spotlight.”

Exam Announcements via UF email and/or bulletin board posting

UF IFAS Agronomy Facebook

UF IFAS Agronomy Slide Shows for use in recruiting students from other campuses

Your consent is requested to post your photo at the following locations:

_____ Award Recipient Announcements (via email, bulletin boards, and websites)

_____ UF IFAS Agronomy and Agroecology websites

_____ UF - Agroecology website to include “Today in Agroecology” and “Student Profile”

_____ UF IFAS Agronomy Facebook

_____ Student Club (AGSA) Promotions

_____ Agronomy & Friends Linked-in Group

_____ UF IFAS Agronomy Slide Shows for use in recruiting students from other campuses

If the field does not have a check mark please then do not use my photo.

Print Name:

If the box does not have a check mark please then do not use my photo.

Signature/Date (required):

The University of Florida’s IFAS Agronomy Department uses photographs in media to promote our Graduate and Undergraduate programs, as well as our research mission. The photos with the student can be individual, field work, or candid photographs. UF IFAS Agronomy Department aims to published student photos with the student’s consent.

This photo consent does not replace any copyright laws associated with photos you might be including with the news article. Agronomy will handle that on a case-by-case basis.