Agroecosystem Science PhD Course Requirement Checklist

Student's Name		Advisor
Semester/Grade Earned	ESGP Required C	Courses (21 credit hours)
// /	ESGP 7899 ESGP 7899 ESGP 7899	ESGP Seminar (1 crhr) ESGP Seminar (1 crhr) ESGP Seminar (1 crhr)
<i>I</i>	Biological Sciences	Approved Course (*See Appendix) (6 crhrs)
 /	Physical Sciences A	pproved Course (*See Appendix) (6 crhrs)
///////////	Social Sciences Poli	cy Approved Course (*See Appendix) (6 crhrs)
Semester/Grade Earned	Agroecosystem S	ciences Required Courses (5 credit hours)
// / /	2 of these 3 cours Entomol 7890 ENR 8890.03 EEOB 8896.04	Agrosystems Special Topic (1 crhr)
	and	
<i> </i>	Geography 5210	Fundamentals of Geographic Information Systems (3 crhrs)
Semester/Grade Earned	Electives (6 credit hours) With advisor's guidance and approval, select from t following list of ESGP courses:	
 	AEDECON 6120 AEDECON 7120 AEDECON 7130 CIVILEN 5420 ENVENG 7217 FABENG 3510	Applied Quantitative Methods II (4 crhrs) Adv Quantitative Methods II (3 crhrs) Adv Quantitative Methods III (3 crhrs) Remote Sensing of Environment (3 crhrs) Applied Mathematical Ecology (3 crhrs) Intro to Biological Engineering (4 crhrs)
Semester/Grade Earned	Research Credits	(48 credit hours)
	Research Hours in A	Advisor's home department

In addition to the general Graduate School requirements of a cumulative grade point average of 3.0 or higher, students must meet specific college policies regarding grades in courses.

I certify that the above named student has meet the requirements for completion of the PhD.

*Appendix

Core and Elective Courses in Biological Sciences

The objective of this core course area is to ensure that students are familiar with the diversity and functioning of organisms and the interactions among species and between organisms and the environment. Because the environmental sciences focus on the relationships between living organisms and their environment, the basic principles of ecology and a solid understanding of ecosystems structure and function is the focus of the ESGP core. This understanding can be gained through coursework that focuses on a particular taxon or a particular kind of ecosystem, but must be broadly applicable to any environment.

Environment and Natural Resources

ENR 5225	Ecosystems Modeling	3 credits		
ENR 5250.01 and 5250.02	Wetland Ecology Restoration and Wetland Field Laboratory	4 credits	AU	
ENR 5263	Biology of Soil Ecosystems	3 credits	SP	
Evolution, Ecology and Organismal Biology				
EEOB 5470	Community and Ecosystem Ecology	3 credits	SP	
Horticulture and Crop Science				
HCS 5602	The Ecology of Agriculture	3 credits	AU	

Core and Elective Courses in Physical Sciences

The objective of this core area is to provide an understanding of physical structure and processes in which ecosystems must function. Physical structure includes soil, water, air, geological media, climate, nutrients, and contaminants. Physical science processes include movement of "abiotic" matter and energy through ecosystems. Core courses must (1) study fundamental physical, hydrological, chemical, or biogeochemical processes and (2) study and emphasize the effects of physical structure and processes on ecosystem biotic components and function and the interactions between the biotic and abiotic components of the ecosystem.

Environment and Natural Resources					
ENR 5222/FABENG	Ecological Engineering and Science	4 credits	SP		
5310/ENVENG 5310					
Food, Agriculture and Biological Engineering					
FABENG 5310/ENR	Ecological Engineering and Science	4 credits	SP		
5222/ENVENG 5180					

Earth Science

FABENG 5320

EARTHSCI 5651	Hydrogeology	4 credits	AU
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Core and Elective Courses in Social Sciences and Policy

3 credits

SP

The objective of the social science core is to provide an understanding of concepts related to the study of human society and/or individuals and their relationships to the structure and function of the ecosystem(s) of which they are a part. Methodology includes a range of approaches, both qualitative and quantitative. Core social science courses must engage social science in a combined theoretical and/or applied study of a physical, cultural, regulatory, or economic relationship between humans and the natural and physical environment.

Environment and Natural Resources			
ENR 8350	Ecosystem Management Policy	3 credits	AU
RURLSOC 5530	Sociology of Agriculture and Food Systems	3 credits	AU
RURLSOC 7560	Environmental Sociology	3 credits	SP

Agricultural, Environmental and Developmental Economics City

Agroecosystems

AED 5330	Benefit-Cost Analysis	3 credits	AU
and Regional Planning			
CRPLAN 6410	Planning for Sustainable Development	3 credits	AU