ENVIRONMENTAL HORTICULTURE & TURFGRASS MANAGEMENT

College of the Environment & Life Sciences (CELS)

EL_EHTM_BS

EFFECTIVE SUMMER 2009

Department: Plant Sciences, (401) 874-2791, www.uri.cels/pls
UC Advisors: Dr. Brian Maynard, 215 Woodward Hall, maynard@uri.edu, (401) 874-5372
Option: Environmental Horticulture and Turfgrass Management (EL_EHTM_BS)
Credits: 120 Total; 36 General Education, 72 Program, 12 Free-Electives

The Major: The major in Environmental Horticulture and Turfgrass Management prepares undergraduate students for professional careers in both the public and private sectors. Flexible course requirements allow students to develop individual areas of concentration and prepare for a variety of positions after graduation. In addition, the program provides a solid background for graduate study in several science and policy disciplines. This program unifies sustainable culture and use of plants to enhance both the natural and human environments.

Career Options: Graduates of this program may pursue careers as horticulturists, golf course superintendents, landscape contractors, park and arboreta managers, garden center and floral shop proprietors, plant propagators, nursery owners and operators, managers of lawn service firms, and technical representatives for seed, equipment, and chemical companies - to name just a few of the opportunities available. Others may enter graduate school and pursue careers in research and education in both public and private institutions.

Transfer out of UC: Must have completed at least 30 credits, minimum GPA of 2.0, and received permission from the UC major advisor.

General Education (36 credits): To satisfy URI's General Education requirements, Plant Sciences students must take a minimum of COM 100/COM 110, WRT 104 (or 105 or 106), one MQ (Mathematical & Quantitative Reasoning), two S (Social Sciences) and 15 credits of General Education courses from Category A (Fine Arts & Literature), L (Letters), and/or F (Foreign Language/Culture). See the URI Course Catalog (or the GE web site at http://www.uri.edu/univcol/acadadv/cai/geneds/) for a listing of all General Education courses. Courses in **bold type** are required or suggested for a minor in business (see separate sheet).

C: COM 101 Public Speaking 3
C: COM 103 Interpersonal Communication 3
Cw: WRT 101 Composition 3
Cw: WRT 201 Introduction to College Research Writing 3
Cw: WRT 227 Business Communications 3
Cw: WRT 235 Writing with Computers 3
M: MTH 107 Introduction to Finite Mathematics 3
M: MTH 108 Topics in Mathematics 3
M: MTH 111 Precalculus 3
M: MTH 131, 132 Applied Calculus I, II ..... 3 ea.
S: APG 200 Language and Culture 3
S: APG 202 The Prehistoric Ages 3
S: APG 203 Cultural Anthropology 3
S: CNS 220 Consumer in the Economy (Anderson) 3
S: **ECN 201 Principles of Economics: Microeconomics** 3
***or* EEC 105 Introduction to Resource Economics (S)** 3
S: ECN 202 Principles of Economics: Macroeconomics 3
S: ENG 330 The Structure of American English 3
S: **MGT 110 Introduction to Business** 3
L: COM 200 The Art of Human Communication 3
L: COM 205 Great American Speeches 3
L: JOR 110 Introduction to the Mass Media 3
A: ART 103 Three-Dimensional Studio I 3
A: ENG 160 Masterpieces of Literature 3
A: ENG 241, 242 American Literature I, II ..... 3 ea.
A: ENG 243 The Short Story 3
A: ENG 251, 252 (A or F) English Literature I, II ..... 3 ea.
F: See catalog for options and courses

II. Pre-Professional Courses (30 credits, 6 credits will apply towards General Education N classes)

PLS 150 Botany for Gardeners 3
BIO 101,102 General Biology 4,4
CHM 101, 102 General Chemistry I, Lab 3,1
or
CHM 103, 105 Introductory Chemistry, Lab 3,1
PLS 200 Introduction to Plant Protection 4
PLS 215 Propagation of Plant Materials 4
PLS 250 Plant Breeding and Genetics 4
PLS 255 Introduction to Horticultural Science 3

III. Professional Concentration (40-48 Credits in the Professional and Supporting Electives Categories)

PLS 210 Plant Protection Practicum 1
PLS 301 Nursery Crop Production Management 3
PLS 306 Landscape Management and Arboriculture 3
PLS 311 Tree and Small Fruit Culture 3
PLS 320 Landscape Design 3
PLS 322 Power Units 3
PLS 324 Vegetable Culture 3
PLS 331 Floriculture and Greenhouse Management 3
PLS 332 Plant Pathology 3
PLS 341 Introductory Turfgrass Management 3
PLS 350 Herbaceous Garden Plants 3

PLS 353 Landscape Plants I 3
PLS 354 Landscape Plants II 3
PLS 361 Weed Science 3
PLS 390 Irrigation Technology 3
PLS 399 Plant Sciences Internship 1-6
PLS 401,402 Plant Sciences Seminar 1,1
PLS 436 Floriculture and Greenhouse Crop Production 3
PLS 440, 441 Diseases of Turfgrasses, Trees, Shrubs, Lab 3,1
PLS 442 Advanced Turfgrass Management 3
PLS 471 Plant Improvement 3
PLS 491, 492 Special Projects and Independent Study ..... 1-3 ea.
ENT 387 Insects of Turf and Ornamentals 3
ENT 411 Pesticides and the Environment 3

IV. Suggested Supporting Electives (Courses in **bold type** are required or suggested for business minor - see separate sheet)

ACC 201, **202 Elementary Accounting** ..... 3 ea.
BAC 110 Business Computing Applications 3
BSL 333, 334 **Legal and Ethical Environment of Business I**, II ..... 3 ea.
CHM 112, 114 General Chemistry II, Lab 3,1
CNS 320 Personal Finance (Anderson) 3
CNS 415 Retirement Planning (Anderson) 3
CPL 434 Introduction to Environmental Law 3
CVE (nnn) Surveying I 3
CSC 101 Computing Concepts 3
EEC 325 Planning and Managing a Small Natural Resource Firm 3
EEC 341 Economics of Agricultural and Seafood Marketing 3
EEC 440 Benefit-Cost Analysis 3
ENT 385, 386 Introductory Entomology, Lab 3,1
ENT 550 Insect Taxonomy and Systematics 3
ENT 555 Insect Pest Management 3
HLT 172 First Aid 1
HLT 272 Advanced First Aid 2
INS 301 Fundamentals of Risk Management and Insurance 3
MGT 300 Introduction to Management and Supervision 3
MGT 301 Organization and Management 3
MGT 303 Personnel Administration 3
MGT 380 Business and Society 3
MKT 301 Marketing Principles 3
NRS 186 Analysis and Presentation of Scientific Data 3
NRS 301 Introduction to Forest Science 3
NRS 312 Methods in Soil and Water Analysis 3
NRS 351 Soil Morphology Practicum 1
NRS 409 Concepts in GIS 3
NRS 410 Fundamentals of GIS 3
NRS 412 Soil-Water Chemistry 3
NRS 450 Soil Conservation and Land Use 3
NRS 451 Soil and Water Conservation and Technology 1
NRS 471 Soil Morphology and Mapping 3
PHY 109, 110 Introduction to Physics, Lab 3,1

Student: **ID No.:** **Advisor:**

I. GENERAL EDUCATION (30 cr. required; 6 cr **N**atural Sciences satisfied by the major) — Cr. 0

A. English Communications (3+3=6)		
EC (3):		0
ECw: WRT (3)		0
B. Mathematical and Quantitative Reasoning (3)		
MQ:		0
C. Social Sciences (3+3=6)		
Recommended: EEC 105 or ECN 201		0
S:		0
D. Letters (3 or 6)		
L:		0
L:		0
E. Fine Arts and Literature (3 or 6)		
A:		0
A:		0
F. Foreign Language/Cross-cultural Competence (3 or 6)		
FC:		0
FC:		0

General Education Websites: GE Courses by Year

Two of the courses taken as part of a student's general education program must be selected from courses designated by a "D" = Diversity

II. PRE-PROFESSIONAL & BASIC SCIENCES — Cr. 0

(30 credits required or permission of advisor, 6+ cr. apply to GE Natural Sciences)

A. Introductory Horticulture (PLS150; 3cr, S/F)		0
B. Biology (8)		
Principles of Biology I (BIO 101; 4cr, S/F)		0
Principles of Biology II (BIO 102; 4cr, S/F)		0
C. Chemistry (4 cr)		
CHM 101/102 or 103/105 (3,1)		0
D. Plant Sciences (15 cr)		
Plant Protection (PLS200; 4cr, F)		0
Plant Propagation (PLS215; 4cr, S)		0
Plant Breeding & Genetics (PLS250; 4cr, F)		0
Intro. Horticultural Sci. (PLS255; 3cr, S)		0

Course Credits Required: 120
Course Credits Completed: 0

Approved for Graduation:

Advisor: _____ Date: _____

Dept. Chair: _____ Date: _____

III. PROFESSIONAL CONCENTRATION *(min 30 cr)* — 0

Course Description:	Course No.	Cr.	EH/TM	*Off:*
6 Required Courses:				
Landscape Management	PLS 306 (4)	0	EH/TM	*F*
Intro. Turf Management	PLS 341 (3)	0	EH/TM	*S, F*
Landscape Plants I	PLS 353 (3)	0	EH/TM	*F*
Diseases of Turf and Ornamentals	PLS 440 (3)	0	EH/TM	*F*
Insects of Turf and Ornamentals	ENT 387 (3)	0	EH/TM	*F*
Pesticides and the Environment	ENT 411 (3)	0	EH/TM	*S*
Additional Courses to make minimum 30 credits:				
Nursery Crop Production	PLS 301 (4)	0	EH	*Alt. S*
Greenhouse Management	PLS 331 (4)	0	EH	*Alt. S*
Fruit Culture	PLS 311 (3)	0		*S*
Landscape Design	PLS 320 (3)	0		*F*
Power Units	PLS 322 (3)	0	TM	*S*
Vegetable Culture	PLS 324 (4)	0		*F*
Herbaceous Garden Plants	PLS 350 (3)	0	EH	*F*
Landscape Plants II	PLS 354 (3)	0	EH	*S*
Weed Science	PLS 361 (3)	0	TM	*F*
Irrigation Technology	PLS 390 (3)	0	TM	*S*
Plant Protection Clinic	PLS 393 (3)	0		*F*
Plant Sciences Seminar I	PLS 401 (1)	0		*F*
Plant Sciences Seminar II	PLS 402 (1)	0		*S*
Advanced Turf Management	PLS 442 (3)	0	TM	*S*
Plant Improvement	PLS 471 (4)	0		*F*

IV. EXPERIENTIAL LEARNING (up to 12 cr.) — 0

Course Description:	Course No.	Cr.	*Off:*
Plant Sciences Internship I/II	PLS 399 (1-3)	0	*F, S*
Special Project/Independent Study	PLS 491 (1-3)	0	*F*
Special Project/Independent Study	PLS 492 (1-3)	0	*S*

V. SUPPORTING ELECTIVES (up to 18 cr.) — 0

Course Description:	Course No.	Cr.
Freshman Inquiry	URI/PLS 101	0
Introduction to Soil Science	NRS 212	0
		0
		0
		0
		0
		0

VI. FREE ELECTIVES (up to 10 cr.) — 0

Course Description:	Course No.	Cr.
		0
		0
		0
		0
		0

Notes: _____

Environmental Horticulture and Turfgrass Management

Freshman 1 (14)	**Freshman 2 (17)**
URI/PLS 101 Traditions and Transformations: Freshmen Seminar/Freshman Inquiry into Plant Sciences (1)	PLS 215 Plant Propagation (4)
PLS 150 Plant Biology for Gardeners(3)	BIO 102 (4)
BIO 101 Principles of Biology I(4)	Math Gen Ed (3)
GE: COM 100 or WRT Communication Fundamentals or Writing to Inform or Explain, Forms of College Writing, or Introduction to Research Writing. (3)	GE: COM 100 Communication Fundamentals or WRT 104: Writing to Inform or Explain or WRT 105: Forms of College Writing or WRT 106: Introduction to Research Writing. (3)
Gen Ed (3)	Gen Ed (3)
Sophomore 1 (17)	**Sophomore 2 (15)**
PLS 255 Horticultural Plant Science (3)	NRS 212 (3)
PLS 200 Plant Protection (4)	PLS 301, 331 or 341 Nursery Crop Production and Management or Floriculture (4) and Greenhouse Management or Introduction to Turf Management (3)
PLS 353 Landscape Plants I (3)	PLS 354 Landscape Plants II (3)
CHM 103/105 Introductory Chemistry/Lab (4)	Gen Ed (3)
Gen Ed (3)	Gen Ed (3)
Junior 1 (15)	**Junior 2 (16)**
ENT 387 Insects Turf & Ornamentals (3)	PLS 442 Advanced Turf (3)
PLS 361 Weeds or PLS 390 Irrigation (3)	PLS 301 or 331 (HORT) Nursery Crop production and Management or Floriculture and Greenhouse Management (4)
One Supporting or Free Elective (3)	PLS 402 PLS Seminar (1)
2 of the following: PLS 250 Genetics (4) PLS 306 Landscape Management (4) PLS 320 Landscape Design (3) PLS 350 Herbaceous Plants (HORT, 3) PLS 353 Landscape Plants 1 (3) PLS 341 Intro Turf (HORT, 3)	2 of the following: (6) PLS 311 Fruit PLS 324 Vegetables PLS 322 Power Units PLS 354 Landscape Plants II
	1 elective (3)
Senior I (15-16)	**Senior 2 (15)**
PLS 440 Diseases of Turf and Ornamentals (3)	ENT 411 Pesticides and the Environment (3)
PLS 361 or PLS 390 (3)	PLS 322 (if not taken in semester 6) (3)
Two of the following (6) PLS 306 Landscape Management (3) PLS 320 Landscape Design (3) PLS 350 Herbaceous Garden Plants (3) PLS 353 Landscape Plants 1 (3) PLS 471 Plant Improvement (4) Or elective	One of the following (3) PLS 311 Fruit PLS 324 Vegetables PLS 354 Landscape Plants II
PLS 399 Internship (3)	Two Free Electives (6)

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***Three year plan for Transfer Students**: Ideally transfers would have taken basic biology, math and chemistry courses, as well as COM100 and WRT104. We accommodate transfers by substituting PLS 150 for BIO 101/102, allowing CHM100 or 101, and accepting MTH 107 or 108 or an appropriate computer science course. This usually sets them on the right track for graduation in 6 semesters.*

Semester 1 (16)	**Semester 2 (17)**
PLS 150 Plant Biology for Gardeners(3)	PLS 215, Plant Propagation (4)
PLS 200 Plant Protection (4)	NRS 212 Soils (3)
PLS 353 Landscape Plants I (3)	PLS 301 or 331 (HORT, 4)
PLS 341 Intro Turf (3)	PLS 354 Landscape Plants II (HORT, 3)
Gen Ed (3)	
Semester 3 (16-17)	**Semester 4 (16)**
PLS 255 Horticultural Plant Science (3)	PLS 442 Advanced Turf (3)
ENT 387 Insects Turf & Ornamentals (3)	PLS 301, 331 (3)
PLS 361 Weeds or PLS 390 Irrigation (3)	PLS 402 Seminar (1)
2 of the following: PLS 250 Genetics (4) PLS 306 Landscape Management (4) PLS 320 Landscape Design (3) PLS 350 Herbaceous Plants (HORT, 3) PLS 353 Landscape Plants 1 (3) PLS 341 Intro Turf (3)	2 of the following: (6) PLS 311 Fruit PLS 324 Vegetables PLS 322 Power Units PLS 354 Landscape Plants II
	1 elective (3)
Semester 5 (15-16)	**Semester 6 (15)**
PLS 440 Diseases of Turf and Ornamentals (3)	ENT 411 Pesticides and the Environment (3)
PLS 361 or PLS 390 (3)	PLS 322 (if not taken in semester 6) (3)
2 of the following: PLS 306 Landscape Management (4) PLS 320 Landscape Design (3) PLS 350 Herbaceous Plants (3) PLS 353 Landscape Plants 1 (3) PLS 471 Plant Improvement (4) Or Elective	One of the following (3) PLS 311 Fruit PLS 324 Vegetables PLS 354 Landscape Plants II
PLS 399 Internship (3)	Two electives (6)