

COMMUNICATION/LIBRARY—13 CREDITS

3	Engl	150	Critical Thinking and Communication	_____
3	Engl	250	Written, Oral, Visual and Electronic Composition	_____
3	Engl	302	Business Communication or	_____
3	Engl	314	Technical Communication	_____
1	Lib	160	Information Literacy	_____
3	Sp Cm	212	Fundamentals of Public Speaking or	_____
3	AgEds	311	Presentation and Sales Strategies for Agricultural Audiences or	_____
3	ComSt	214	Professional Communication	_____

Communications Proficiency (with a grade of C or better)
6 credits of English composition (see approved courses above)
3 credits of speech fundamentals (see approved courses above)

MATHEMATICAL SCIENCES—6 CREDITS

COMPLETE **ONE** COURSE FROM THE FOLLOWING GROUP:

3	Math	140	College Algebra or	_____
3	Math	150	Discrete Mathematics for Business and Social Sciences or	_____
4	Math	165	Calculus I or	_____
4	Math	181	Calculus and Mathematical Modeling for the Life Sciences	_____

AND COMPLETE **ONE** COURSE FROM THE FOLLOWING GROUP:

4	Stat	101	Principles of Statistics or	_____
3	Stat	104	Introduction to Statistics or	_____
3	Stat	226	Introduction to Business Statistics I or	_____
4	Stat	301	Intermediate Statistical Concepts and Methods	_____

PHYSICAL SCIENCES—11 CREDITS

4	Chem	163	College Chemistry and	_____
1	Chem	163L	Laboratory in College Chemistry or	_____
4	Chem	177	General Chemistry I and	_____
1	Chem	177L	Laboratory in General Chemistry I	_____

AND COMPLETE **ONE** COURSE FROM THE FOLLOWING GROUP:

3	Agron	259	Organic Compounds in Plants and Soils	_____
3	Chem	178	General Chemistry II and	_____
1	Chem	178L	Laboratory in General Chemistry II	_____
3	Chem	331	Organic Chemistry I and	_____
1	Chem	331L	Laboratory in Organic Chemistry I	_____
3	Phys	101	Physics for the Nonscientist	_____
5	Phys	111	General Physics	_____
4	Phys	115	Physics for the Life Sciences	_____

AND COMPLETE **ONE** COURSE FROM THE FOLLOWING GROUP:

3	BBMB	221	Structure and Reactions in Biochemical Processes	_____
3	Chem	231	Elementary Organic Chemistry and	_____
1	Chem	231L	Laboratory in Elementary Organic Chemistry	_____
3	Chem	331	Organic Chemistry I and	_____
1	Chem	331L	Laboratory in Organic Chemistry I	_____

A student must take either Chem 163/163L or Chem 177/177L. Credit for both BBMB 221 and Chem 231 may not be applied toward graduation.

GROW YOUR OWN ADVENTURE.

LIFE SCIENCES - 6 CREDITS

- 3 Biol 211 Principles of Biology I _____
- 3 Approved Life Sciences Course _____

BIOLOGICAL SCIENCES—18 CREDITS

- 3 Biol 211 Principles of Biology I **and** _____
- 1 Biol 211L Principles of Biology Laboratory I _____

AND COMPLETE FOURTEEN OR MORE CREDITS FROM THE FOLLOWING GROUP:

- 1 Agron 217 Weed Identification _____
- 3 Agron 282 Soil Conservation and Land Use _____
- 3 Agron 316 Crop Structure—Function Relationships _____
- 3 Agron 317 Principles of Weed Science _____
- 3 Agron 354 Soils and Plant Growth _____
- 1 Agron 354L Soil and Plant Growth Laboratory _____
- 3 Biol 212 Principles of Biology II _____
- 1 Biol 212L Principles of Biology II Laboratory _____
- 4 Biol 312 Ecology _____
- 3 Biol 313 Principles of Genetics **and** _____
- 1 Biol 313L Genetics Laboratory **or** _____
- 3 Gen 320 Genetics, Agriculture and Biotechnology _____
- 3 Biol 314 Principles of Molecular Cell Biology _____
- 3 Biol 355 Plants and People _____
- 4 Biol 366 Plant Systematics _____
- 3 Biol 430 Principles of Plant Physiology _____
- 4 Biol 454 Plant Anatomy _____
- 3 Biol 474 Plant Ecology _____
- 1 Ent 201 Introduction to Insects _____
- 2 Ent 211 Insects and Society _____
- 3 Ent 370 Insect Biology _____
- 3 Ent 375 Plant Protection Using Natural Enemies _____
- 3 Ent 376 Fundamentals of Entomology and Pest Management _____
- 3 For 416 Forest Insects and Diseases _____
- 1 For 416L Forest Insects and Diseases Lab _____
- 3 PI P 408 Principles of Plant Pathology _____

HUMANITIES, ETHICS, AND SOCIAL SCIENCE—9 CREDITS

- 3 Humanities (from an approved list) _____
- 3 Ethics (from an approved list) _____
- 3 Social Science (from an approved list) _____

INTERNATIONAL PERSPECTIVES AND US DIVERSITY - 6 CREDITS

- 3 International Perspectives (from an approved list) _____
- 3 US diversity (from an approved list) _____

SOIL SCIENCES—3 CREDITS

- 3 Agron 182 Introduction to Soil Science _____

**HORTICULTURISTS DON'T GROW ON TREES.
THAT'S WHERE WE COME IN.**

HORTICULTURAL SCIENCES—30 CREDITS

1	Hort	110	Professional and Educational Development in Horticulture	_____
3	Hort	221	Principles of Horticulture Science	_____
3	Hort	321	Horticulture Physiology	_____
2	Hort	445	Horticulture Management and Administration	_____
AND COMPLETE TWENTY-ONE OR MORE CREDITS FROM THE FOLLOWING GROUP:				
3	Hort	240	Trees, Shrubs, and Woody Vines for Landscaping	_____
3	Hort	276	Understanding Grape and Wine Science	_____
2	Hort	281	Landscape Graphics	_____
3	Hort	282	Educating Youth through Horticulture	_____
2	Hort	283	Pesticide Application Certification	_____
1	Hort	291A	Horticulture Professional Development - Turf	_____
1	Hort	291B	Horticulture Professional Development - Landscape	_____
1	Hort	291C	Horticulture Professional Development - Cross Commodity	_____
3	Hort	322	Plant Propagation	_____
3	Hort	330	Herbaceous Ornamental Plants	_____
3	Hort	331	Hydroponic Food Crop Production	_____
4	Hort	332	Greenhouse and Nursery Operations and Management	_____
3	Hort	338	Seed Science and Technology	_____
2	Hort	341	Woody Plant Cultivars: Shade Trees, Ornamental Trees, and Woody Shrubs	_____
3	Hort	342	Landscape Plant Installation, Establishment, and Maintenance	_____
3	Hort	351	Turfgrass Establishment and Management	_____
1	Hort	351L	Turfgrass Establishment and Management Laboratory	_____
3	Hort	354	Soils and Plant Growth	_____
1	Hort	354L	Soils and Plant Growth Laboratory	_____
3	Hort	376	Fundamentals of Field Production of Horticultural Food Crops	_____
2	Hort	380	Principles of Garden Composition	_____
2	Hort	381	Beginning Garden Composition Studio	_____
1-2	Hort	391	Horticultural Management Experience	_____
R	Hort	398	Cooperative Education	_____
3	Hort	421	Introduction to Plant Breeding	_____
3	Hort	424	Sustainable and Environmental Horticulture Systems	_____
3	Hort	434	Floriculture Crop Production	_____
3	Hort	435	Landscape Plant Production	_____
3	Hort	444	Landscape Construction Management	_____
2	Hort	451	Professional Turfgrass Management	_____
3	Hort	452	Integrated Management of Diseases and Insect Pests of Turfgrasses	_____
3	Hort	453	Sports Turf Management	_____
3	Hort	454	Turf and Landscape Irrigation	_____
3	Hort	461	Fruit Crop Production and Management	_____
2	Hort	471	Vegetable Production and Management	_____
1	Hort	471L	Vegetable Production and Management Laboratory	_____
3	Hort	475	Urban Forestry	_____
3	Hort	476	Horticultural Postharvest Technology (taught 2017, alternate Fall odd years)	_____
2	Hort	481	Advanced Garden Composition	_____
3	Hort	484	Organic Agricultural Theory and Practice	_____
1-4	Hort	490	Independent Study (No more than 4 credits toward graduation)	_____
1-2	Hort	491	Seed Science Internship Experience	_____
Arr.	Hort	493	Workshop in Horticulture	_____
1	Hort	494B	Service Learning - Domestic - St. John USVI	_____
R	Hort	495	Horticulture Travel Course Preparation	_____
3	Hort	496	Horticulture Travel Course	_____
3	Hort	511	Integrated Management of Tropical Crops	_____
2	Hort	551	Growth and Development of Perennial Grasses	_____

Transfer students may transfer up to 10 credits of 200— and 300— level courses in the horticulture area.

SPECIALIZED OPTIONS

A minor in an Approved Area of Study may be substituted for the specialization option with permission of student’s advisor.
A student may add business courses to the option with permission of the advisor.

GREENHOUSE PLANT PRODUCTION—12 CREDITS

Required Courses: Hort 240, 322, 330, 331, 332, 434, **and** 435
Recommended Courses: Hort 391, 424 and 476

3	Acct	284	Financial Accounting (Required for Option)	_____
AND COMPLETE NINE OR MORE CREDITS FROM THE FOLLOWING GROUP:				
3	Acct	215	Legal Environment of Business	_____
3	Acct	285	Managerial Accounting	_____
3	Acct	316	Business Law	_____
3	Agron	206	Introduction to Weather and Climate	_____
4	ComS	103	Computer Applications	_____
3	Econ	101	Principles of Microeconomics	_____
3	Econ	102	Principles of Macroeconomics	_____
3	Econ	230	Farm Business Management	_____
3	Econ	234	Small Business Management (Prereq Econ 101)	_____
3	Econ	334	Entrepreneurship in Agriculture (Prereq Econ 101)	_____
4	EnSci	4611	Introduction to GIS	_____
3	Mgmt	310	Entrepreneurship and Innovation (Prereq Econ 101)	_____
3	Mgmt	313	Feasibility Analysis and Business Planning (Prereq Mgmt 310)	_____
3	Mgmt	370	Management of Organizations (Prereq Econ 101)	_____
3	Mgmt	371	Organizational Behavior (Prereq Mgmt 370)	_____
3	Mkt	340	Principles of Marketing (Prereq Econ 101)	_____
3	Mkt	442	Sales Management (Prereq Mkt 340)	_____
3	Mkt	446	Retailing (Prereq Mkt 340)	_____
3	Mkt	447	Consumer Behavior (Prereq Mkt 340)	_____
3	TSM	270	Principles of Injury Prevention and Safety	_____

HORTICULTURE FOOD CROP PRODUCTION AND MANAGEMENT—12 CREDITS

Required Courses: Hort 276, 376, 461, 471, 471L, 476
Recommended Courses: Hort 322, 331, 332, 338, 391, **and** 484

3	Acct	284	Financial Accounting (Required for Option)	_____
AND COMPLETE NINE OR MORE CREDITS FROM THE FOLLOWING GROUP:				
3	Acct	215	Legal Environment of Business	_____
3	Acct	285	Managerial Accounting	_____
3	Acct	316	Business Law	_____
4	ComS	103	Computer Applications	_____
3	Econ	101	Principles of Microeconomics	_____
3	Econ	102	Principles of Macroeconomics	_____
3	Econ	230	Farm Business Management	_____
3	Econ	234	Small Business Management (Prereq Econ 101)	_____
3	Econ	334	Entrepreneurship in Agriculture (Prereq Econ 101)	_____
3	Env S	293	Environmental Planning	_____
3	Env S	324	Energy and the Environment	_____
3	Env S	382	Environmental Sociology	_____
3	Env S	491	Environmental Law and Planning	_____
2	FSHN	403	Food Laws and Regulations	_____

HORTICULTURAL FOOD CROP PRODUCTION AND MANAGEMENT CONTINUED...

3	FSHN	405	Food Quality Assurance	_____
3	FSHN	471	Food Processing	_____
3	FSHN	472	Food Processing Laboratory	_____
3	Mgmt	310	Entrepreneurship and Innovation (Prereq Econ 101)	_____
3	Mgmt	313	Feasibility Analysis and Business Planning (Prereq Mgmt 310)	_____
3	Mgmt	370	Management of Organizations (Prereq Econ 101)	_____
3	Mgmt	371	Organizational Behavior (Prereq Mgmt 370)	_____
3	Mkt	340	Principles of Marketing (Prereq Econ 101)	_____
3	Mkt	442	Sales Management (Prereq Mkt 340)	_____
3	Mkt	446	Retailing (Prereq Mkt 340)	_____
3	Mkt	447	Consumer Behavior (Prereq Mkt 340)	_____
3	TSM	270	Principles of Injury Prevention and Safety	_____
3	TSM	324	Soil and Water Conservation Management	_____

LANDSCAPE DESIGN, INSTALLATION, AND MANAGEMENT—12 CREDITS

Required Courses: Hort 240, 281, 330, 341, 342, 351, 380, 381, 444, **and** 481
 Recommended Courses: Hort 322, 332 and 391

3	Acct	284	Financial Accounting (Required for Option)	_____
AND COMPLETE NINE OR MORE CREDITS FROM THE FOLLOWING GROUP:				
3	Acct	215	Legal Environment of Business	_____
3	Acct	285	Managerial Accounting	_____
3	Acct	316	Business Law	_____
4	ComS	103	Computer Applications	_____
3	Econ	234	Small Business Management (Prereq Econ 101)	_____
3	Econ	334	Entrepreneurship in Agriculture (Prereq Econ 101)	_____
3	Mgmt	310	Entrepreneurship and Innovation (Prereq Econ 101)	_____
3	Mgmt	313	Feasibility Analysis and Business Planning (Prereq Mgmt 310)	_____
3	Mgmt	370	Management of Organizations (Prereq Econ 101)	_____
3	Mgmt	371	Organizational Behavior (Prereq Mgmt 370)	_____
3	Mkt	340	Principles of Marketing (Prereq Econ 101)	_____
3	Mkt	442	Sales Management (Prereq Mkt 340)	_____
3	Mkt	447	Consumer Behavior (Prereq Mkt 340)	_____
3	TSM	324	Soil and Water Conservation Management	_____

PUBLIC HORTICULTURE—12 Credits

Required Courses: Hort 240, 282, 322, **and** 330
 Recommended Courses: Hort 281, 332, 341, 342, 351, 351L, 376, 380, 381 **and** 391

3	Acct	284	Financial Accounting (Required for Option)	_____
AND COMPLETE NINE OR MORE CREDITS FROM THE FOLLOWING GROUP:				
3	Acct	215	Legal Environment of Business	_____
3	Acct	285	Managerial Accounting	_____
3	Acct	316	Business Law	_____
2	AgEdS	310	Foundations of Agricultural Education Programs	_____
3	AgEdS	401	Planning Agriculture and Life Sciences Education Programs	_____
3	ComSt	102	Introduction to Interpersonal Communication	_____
3	ComSt	214	Professional Communication	_____
3	ComSt	317	Small Group Communication	_____

PUBLIC HORTICULTURE CONTINUED...

3	Econ	101	Principles of Microeconomics	_____
3	Econ	234	Small Business Management (Prereq Econ 101)	_____
3	Econ	334	Entrepreneurship in Agriculture (Prereq Econ 101)	_____
3	Engl	220	Descriptive English Grammar	_____
3	Engl	303	Free Lance Writing for Popular Magazines	_____
3	Engl	305	Creative Writing—Nonfiction	_____
3	Engl	309	Proposal and Report Writing	_____
3	Engl	313	Rhetorical Website Design	_____
3	Engl	415	Business and Technical Editing	_____
3	Engl	416	Visual Aspects of Business and Technical Communication	_____
3	EnSci	446	Integrating GPS and GIS for Natural Resource Management	_____
4	EnSci	461I	Introduction GIS	_____
3	Fin	301	Principles of Finance	_____
3	JLMC	201	Reporting and Writing for the Mass Media	_____
3	JLMC	310	Fundamentals of Photojournalism	_____
3	Mgmt	370	Management of Organizations (Prereq Econ 101)	_____
3	Mgmt	371	Organizational Behavior (Prereq Econ 101)	_____
3	Mgmt	471	Personnel and Human Resource Management	_____
3	PR	220	Principles of Public Relations	_____
3	SpCm	312	Business and Professional Speaking	_____
3	SpCm	313	Communication in Classrooms and Workshops	_____

HORTICULTURE RESEARCH—12 credits

Required Courses: AgEds 312 (at least 3 credits); Biol 430; BBMB 301 **or** 404; Chemistry 177, 177L, 178, 178L, 331, 331L, 332, 332L; Hort 322; Math 165, or Math 181 and 166; **and** Physics 111 **and** 112

Recommended Courses: Hort 240, 330, 331, 332, 342, and 391

COMPLETE **FIVE** OR MORE CREDITS FROM THE FOLLOWING GROUP:

3	BBMB	404	BiochemistryI	_____
3	BBMB	405	Biochemistry II	_____
3	BBMB	411	Techniques in Biochemical Research	_____
3	Biol	313	Principles of Genetics	_____
1	Biol	313L	Genetics Laboratory	_____
3	Biol	314	Principles of Molecular Cell Biology	_____
3	Biol	315	Biological Evolution	_____
2	Chem	211	Quantitative and Environmental Analysis	_____
2	Chem	211L	Quantitative and Environmental Analysis Laboratory	_____
4	Chem	316	Instrumental Methods of Chemical Analysis	_____
1	Chem	316L	Instrumental Analysis Laboratory	_____
2	Chem	321L	Laboratory in Physical Chemistry	_____
3	Chem	322L	Laboratory in Physical Chemistry	_____
3	Chem	324	Introductory Quantum Mechanics	_____
3	Com S	107	Applied Computer Programming or	_____
3	Com S	207	Fundamentals of Computer Programming	_____
3	Gen	409	Molecular Genetics	_____
3	Gen	410	Analytical Genetics	_____

WHERE BULBS GO OFF AND GRADUATE.

TURFGRASS MANAGEMENT—12 credits

Required Courses: Hort 240, 351, 351L, 451, 452, 453, 454, **and** 551
 Recommended Courses: Hort 330, 322, 391, and 424
 Suggested Biological Courses: Agronomy 217, 317, 354/354L, Biology 212, Entomology 376, **and** Plant Pathology 408

3	Acct	284	Financial Accounting (Required for Option)	_____
AND COMPLETE NINE OR MORE CREDITS FROM THE FOLLOWING GROUP:				
3	Acct	285	Managerial Accounting	_____
3	Acct	316	Business Law	_____
3	Agron	206	Introduction to Weather and Climate	_____
3	Agron	360	Environmental Soil Science	_____
3	Agron	459	Environmental Soil and Water Chemistry	_____
4	Com S	103	Computer Applications	_____
3	Econ	234	Small Business Management (Prereq Econ 101)	_____
3	Econ	334	Entrepreneurship in Agriculture (Prereq Econ 101)	_____
4	EnSci	4611	Introduction to GIS	_____
2	Env S	201	Introduction to Environmental Issues	_____
3	Env S	324	Energy and the Environment	_____
3	Hsp M	101	Introduction to the Hospitality Industry	_____
2	Hsp M	289	Contemporary Club Management	_____
3	Mgmt	370	Management of Organizations (Prereq Econ 101)	_____
3	Mgmt	371	Organizational Behavior (Prereq Mgmt 370)	_____
3	TSM	270	Principles of Injury Prevention and Safety	_____
3	TSM	324	Soil and Water Conservation Management	_____

FREE ELECTIVES—14-18 credits

All specialization options must complete 14-18 free elective credits.

129 Total Credits

**LAYING THE GROUNDWORK
FOR FUTURE CHAMPIONS.**