

## FISHERIES AND AQUACULTURE BT COURSE SEQUENCE

### Freshman - Fall Semester

BIOL111	Biology I	4
ENGL101	English Composition	3
FWLD101	Intro. Natural Res. Conserv.	3
FWLD 112	Aquaculture Techniques	1
MATH125	Statistics	3
FFCS199	Foundation for College Success	<u>1</u>
		15

### Freshman - Spring Semester

BIOL131	Nat. History of the Vertebrates	3
FWLD115	Fisheries Techniques	3
CHEM111	General Chemistry I	4
CITA112	Spreadsheet & Database Appl.	3
	General Electives	1
PHED151	Wellness	<u>1</u>
		15

### Sophomore - Fall Semester

BIOL215	Aquatic Ecology	3
FWLD220	Wildlife Management	3
ORHT121	Woody Plant Materials	3
FWLD 209	Fish Nutrition	1
	General Education Core	3
	General Education Core	<u>3</u>
		16

### Sophomore - Spring Semester

FWLD211	Wildlife Law & Public Relations	2
FWLD221	Fisheries Science	3
GIST130	Geographic Infor. Systems	3
FWLD 217	Hatchery Techniques	1
	General Education Core	3
	General Education Core	<u>3</u>
		15

### Junior - Fall Semester

FWLD325	Aquaculture Engineering	3
BIOL307	Invertebrate Zoology	4
BIOL318	Fish Biology	4
COMM301	Technical Writing	3
MATH225	Statistical Methods	<u>3</u>
		17

### Junior - Spring Semester

AGBU107	Agricultural Business Oper.	3
	or	
BADM315	Entrepreneurship	
FWLD330	Prod. Mariculture/Aquaculture	3
FWLD440	Fisheries Research	3
CHEM216	Water Chemistry	3
	General Electives	<u>3</u>
		15

### Senior - Fall Semester

FWLD430	Fish Hatchery Management	3
FWLD350	Wetlands Assess. & Delineation	3
FWLD351	Wildlife Pol./Regulatory Compl.	1
BIOL415	Marine Ecology	4
FWLD400	Pond Management	1
	Physical Science Elective	<u>4</u>
		16

### Senior - Spring Semester

FWLD451	Aquatic/Marine Res. Mgmt.	3
FWLD421	Fisheries Management	3
ENVR350	Environmental Law & Policy	3
	General Electives	2
	Physical Science Elective	<u>4</u>
		15

**124 Credits**

The first two years of the Fisheries & Aquaculture Program satisfies the requirements for the Fisheries & Wildlife Associates Degree in Applied Science.

All Fisheries & Aquaculture graduates qualify for certification by the American Fisheries Society as Fisheries Scientists.

Fisheries & Aquaculture graduates qualify for all NYSDEC technical and professional positions:

- Fish & Wildlife Tech-1
- Fish & Wildlife Tech-2
- Fish Culturist-1
- Biologist – Ecology
- Biologist – Wildlife
- Biologist – Aquatic
- Biologist – Marine
- Forest Ranger-1
- ECO Trainee-1
- Park Ranger

# BT DEGREE IN FISHERIES & AQUACULTURE PROGRAM REQUIREMENTS

## MAJOR FIELD REQUIREMENTS 62 Credits

*Upper/Lower-Division (GIST, AGBU, BADM, CITA, ENVR, AGRN, ORHT, BIOL or FWLD)*

<b>Fisheries Requirement</b>		<b>12 Credits</b>
FWLD115	Fisheries Techniques	3
FWLD221	Fisheries Science	3
FWLD440	Fisheries Research	3
FWLD421	Fisheries Management	3

<b>Aquaculture Requirement</b>		<b>13 Credits</b>
FWLD112	Aquaculture Techniques	1
FWLD209	Fish Nutrition	1
FWLD217	Hatchery Techniques	1
FWLD330	Prod. Mariculture/Aquaculture	3
FWLD325	Aquaculture Engineering	3
FWLD400	Pond Management	1
FWLD430	Fish Hatchery Management	3

<b>Ecology Requirement</b>		<b>13 Credits</b>
BIOL215	Aquatic Ecology	3
FWLD350	Wetland Assessment/Delineation	3
BIOL415	Marine Ecology	4
FWLD451	Aquatic/Marine Res. Mgmt.	3
<b>Other Recommended Ecology Courses</b>		
BIOL211	Terrestrial Ecology	3
BIOL212	Forest Ecology	3
FWLD320	Ecology/Mgmt of Waterfowl	3
BIOL308	Terristrial Invertebrate Ecology	3

<b>Conservation Law Requirement</b>		<b>6 Credits</b>
<b>Recommended Courses</b>		
FWLD211	Wildlife Law Enforcement	2
FWLD351	Wildlife Policy/Regulatory Compl	1
ENVR350	Environmental Law & Policy	3

<b>Natural Resource Conser. Requirement</b>		<b>9 Credits</b>
FWLD101	Intro. Natural Res. Cons.	3
FWLD220	Wildlife Management	3
ORHT121	Woody Plant Materials	3
<b>Other Recommended Conservation Courses</b>		
BIOL340	Ecological Restoration	3
BIOL403	Conservation Biology	3
AGRN425	Watershed Management	3
AGRN121	Soil & Water Conservation	3

<b>Analytical Requirement</b>		<b>6 Credits</b>
CITA112	Spreadsheet Database Appl.	3
GIST130	Geographic Information Sys.	3

<b>Business Requirement</b>		<b>3 Credits</b>
<b>Recommended Courses</b>		
AGBU107	Ag. Business Operations	3
BADM316	Entrepreneurship	3

## LIBERAL ARTS & SCIENCES REQUIREMENTS 56 Credits

<b>Communications</b>		<b>6 Credits</b>
ENGL101	Composition	3
COMM301	Technical Writing	3

<b>Gen. Education Requirements</b>		<b>12 Credits</b>
American History	<i>Pick 4/7 categories.</i>	
Arts		
Foreign Language		
Humanities		
Social Science ( <i>Recom: Intro. To Sustainability</i> )		
Western Civilization		
Civilization		

<b>Physical Education Requirements</b>		<b>1 Credit</b>
PHED151	Wellness	1

<b>Freshman Orientation</b>		<b>1 Credit</b>
FFCS199	Foundation for College Success	1

<b>Mathematics Requirements</b>		<b>6 Credits</b>
MATH125	Statistics	3
MATH225	Statistical Methods <b>OR</b>	3
MATH231	Calculus	4

### **Physical Sciences 15 Credits**

<b>Chemistry Requirements</b>		
CHEM111	General Chemistry	4
CHEM216	Water Chemistry	3
<b>Recommended Physical Sciences Courses</b>		
AGSC111	Intro. To Soil Science	3
CHEM112	General Chemistry	4
CHEM231	Organic Chemistry	4
PHYS111	Physics	4
PSCI102	Physical Geology	3
PSCI103	Field Geology	3
PSCI101	Astronomy	3

### **Biological Requirements 15 Credits**

BIOL111	General Biology	4
BIOL131	Natural History of Vertebrates	3
BIOL307	Invertebrate Zoology	4
BIOL318	Fish Biology	4
<b>Other Recommended Biological Courses</b>		
BIOL105	Genetics	3
BIOL300	Principles of Parasitology	3
BIOL317	Herpetology	3
BIOL400	Evolutionary Biology	3
BIOL320	Environmental Toxicology	3
BIOL364	Biotechnology	4

## GENERAL ELECTIVES 6 Credits

**GRAND TOTAL 124 Credits**