

SECTION IV: DEPARTMENT OF WILDLIFE, FISHERIES AND AQUACULTURE

2020–2021 WILDLIFE, FISHERIES AND AQUACULTURE MAJOR Wildlife, Fisheries and Aquaculture Science Concentration (Sample Schedule) Total Hours = 124 (effective Fall 2017)			
FRESHMAN YEAR			
Fall Semester		Spring Semester	
BIO 1134	Biology I	BIO 1144	Biology II
CH 1043/1213	Survey of Chemistry I or Chemistry I (C in MA 1313 or ACT math subscore 24)	CH 1053/1223*	Survey of Chemistry II (CH 1043) or Chemistry II (C or better in CH 1213)
EN 1103	English Comp. I (ACT subscore 17)	EN 1113	English Composition II (EN 1103)
WFA 1102	Wildlife and Fisheries Profession (FR, SO, or instructor consent)(FL)	MA 1613	Calc. for Bus. and Life Sci. (C in MA 1313 or ACT math subscore 24)
	Humanities Elective (3)		Oral Communication Elective (3)
SOPHOMORE YEAR			
Fall Semester		Spring Semester	
PSS 3303	Soils (CH 1043)	BIO 3103	Genetics (MA 1313, BIO 1134)**
PSS 3301	Soils Lab (CH 1043)	WFA 4243	Wildlife Techniques (SO)(SP)
WFA 3133	Appl. Aq. & Terr. Ecol. (BIO 1134 & 1144)		Humanities Elective (3)
	Statistics Elective (3)		Fine Arts Elective (3)
	WFA Social Science Elective (3)		Social Science Elective (3)
FO 2113	Dendrology (BIO 1144)**		
Summer Semester			
Students are strongly encouraged to obtain career-related professional experience. Internship credit may be available with prior approval.			
JUNIOR YEAR			
Fall Semester		Spring Semester	
WFA 4223	Wildlife Plant ID (BIO 1134 & BIO 1144 & WFA 3133)(FL)	WFA 4153	Prin Wildlife Conservation and Management (SO)(WFA 3133 or FO 4123)
WFA 4123	Wildlife & Fisheries Biometrics (ST 3123 & C in MA 1613)(FL)		Writing Elective (3)
	WLFS Natural Resources Policy Elective (3)		Life Science Elective (4)
	Computer Application Elective (3)		Zoology Elective (4)
	Wildlife Biology Elective (3)		Aquatics Elective (3)
Summer Semester			
Students are strongly encouraged to obtain career-related professional experience. Internship credit may be available with prior approval.			
SENIOR YEAR			
Fall Semester		Spring Semester	
WFA 4353	Fish and Wildlife Policy and Law Enforcement (SR)(FL)	WFA 4473	Wildlife and Fisheries Prac. (SR)(WFA 3133 and WFA 4153)(SP)
	WLFS Professional Elective (3)		Wildlife Biology Elective (3)
	WLFS Professional Elective (3)		WLFS Professional Elective (3)
	WLFS Professional Elective (3)		WLFS Professional Elective (3)
	WLFS Professional Elective (3)		WLFS Professional Elective (3)

Classes in **BOLD** require a C or better. FL= offered only in fall semester; SP= offered only in spring semester

SO=Sophomore standing, JR=Junior standing, SR=Senior standing

*Survey of Chem II requires prerequisite of Survey of Chem. Cannot switch between series.

**Substitutions available

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FINE ARTS ELECTIVES (MSU CORE)		HUMANITIES ELECTIVES (MSU CORE)	
ARC 1013	Architectural Appreciation	AAS 1063	Intro to African American Studies
ART 1013	History of Art I	ARC 2313	History of Architecture I
ART 1023	History of Art II	ARC 3313	History of Architecture II (ARC 2313)
ART 1113	Art Appreciation	EN 2203	Intro to Lit (EN 1103, EN 1113)
CO 1503	Intro to the Theatre	EN 2213	English Lit Before 1800 (EN 1103, EN 1113)
HON 3173	Honors Seminar in Fine Arts (SO)	EN 2223	English Lit After 1800 (EN 1103, EN 1113)
ID 3643	History of Interiors I	EN 2243	American Lit Before 1865 (EN 1103, EN 1113)
LA 1803	Landscape Architecture Appreciation	EN2253	American Lit After 1865 (EN 1103, EN 1113)
MU 1103	African American Music	EN 2273	World Lit Before 1600 (EN 1103, EN 1113)
MU 1113	His & Appr of Music	EN 2283	World Lit After 1600 (EN 1103, EN 1113)
MU 1123	American Music App	FL 1113-2143	Foreign Language
MU 1133	History of Rock and Roll	HI 1063	Early US History
PE 1323	His & Appr of Dance	HI 1073	Modern US History
PSS 2343	Floral Design	HI 1163	World History Before 1500
TKI 2413	His & Appr of the Artcrafts	HI 1173	World History After 1500
STATISTICS ELECTIVES (MSU CORE)		HI 1213	Early Western World
ST 2113	Intro to Stats (ACT Math subscore 24 or C in MA 1313)	HI 1223	Modern Western World
ST 3123	Intro to Stat. Inf. (ACT Math subscore 24 or C in MA 1313)(recommended)	HI 1313	East Asian Civ to 1300
ORAL COMMUNICATION ELECTIVES		PHI 3153	Aesthetics
AELC 3333	Presentations in Ag & Life Sci	REL 1103	Intro to Religion
CO 1003	Fund of Public Speaking	REL 3213	World Religions I
CO 1013	Intro to Communication	REL 3223	World Religions II
WRITING ELECTIVES			
AELC 3203	Prof Writing ANR Hum Sci (JR)(EN 1103, EN 1113)		
BCH 4503	Science Communication Skills		
CO 3343	Writing for the Media (C in EN 1113)		
EDF 3413	Writing for Thinking (JR)(EN 1103, EN 1113)		
EN 3313	Writing for the Workplace (EN 1113)		
MGT 3213	Organizational Communication (EN 1113)		
APPROVED SUBSTITUTIONS FOR FO2113 DENDROLOGY			
BIO 2113	Plant Biology (BIO 1134)		
BIO 2213	Survey of Plant Kingdom		
BIO 4203	Taxonomy of Spermatophytes (BIO 2113, BIO 2213)		
BIO 4213	Plant Ecology		
PSS 3133	Intro Weed Science (BIO 2113; CH 1213 or CH 1053)		

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SOCIAL SCIENCE ELECTIVES (MSU CORE)		WILDLIFE BIOLOGY ELECTIVES	
ADS 1013	Animal Agriculture & Society: Food for Thought	WFA 4423	Herpetology (WFA 3133)
AEC 2713	Introduction to Food and Resource Economics	WFA 4433	Mammalogy (WFA 3133)
AN 1103	Introduction to Anthropology	WFA 4443	Ornithology (WFA 3133)
AN 1143	Introduction to Cultural Anthropology	AQUATICS ELECTIVES	
AN 1543	Introduction to Archaeology	WFA 4133	Fisheries Science (ST 3123)
AN 2403	Introduction to the Study of Language	WFA 4173	Fish Physiology (BIO 1134, BIO 1144)
CO 1223	Introduction to Communication Theory	WFA 4183	Prin & Prac of Aquaculture (BIO 1134, BIO 1144)
CO 1403	Introduction to the Mass Media	WFA 4233	Limnology (WFA 3133)
EC 1033	Economics of Social Issues	WFA 4313	Fisheries Mgt (WFA 3133)
EC 2113	Prin of Macroeconomics (SO)	WFA 4383	Wetlands Ecology (JR)(WFA 3133)
EC 2123	Prin of Microeconomics (SO)	WFA 4453	Ichthyology (WFA 3133)
EN 2403	Introduction to the Study of Language	BIO 4224	Aquatic Biology (BIO 2113, WFA 3133)
EPY 2513	Human Growth and Development	CVM 4134	Aquatic Animal Health (any microbiology, any physiology)
EPY 3503	Principles of Educational Psychology	GG 3613	Water Resources (GG 1113)
EPY 3543	Psychology of Adolescence	GG 4523	Coastal Environments (GG 4523)
FO 4113	Forest Resource Economics (AEC 2713)	ZOOLOGY ELECTIVES	
GR 1123	Introduction to World Geography	WFA 4113	Animal Behavior
GR 2013	Human Geography	WFA 4453	Ichthyology (WFA 3133)
HDFS 1813	Development through the Lifespan	BIO 2103	Cell Biology (6 hours Biology, CH 1223)
HON 1173	The West and the Wider World	BIO 3304	General Microbiology (CH 1053 or CH 1223)
HON 3143	Hon Seminar in Soc Sci (SO)(EN 1103, EN 1113)	BIO 3524	Biology of Vertebrates
PO 1013	Animal Agriculture & Society: Food for Thought	EPP 2213	Intro to Insects
PS 1113	American Government	EPP 4154	General Entomology
PS 1313	Introduction to International Relations	EPP 4313	Forensic Entomology
PS 1513	Comparative Government	LIFE SCIENCE ELECTIVES	
PSY 1013	General Psychology	WFA 4173	Fish Physiology (BIO 1134, BIO 1144)
PSY 3073	Psychology of Interpersonal Relations (PSY 1013)	WFA 4263	Wildlife Diseases (BIO 1134, BIO 1144)
SO 1003	Introduction to Sociology	WFA 4323	Wildlife Nutrition and Phys (BIO 1134, BIO 1144)
SO 1103	Contemporary Social Problems	ADS 4114	Animal Nutrition (CH 2503/2501 OR CH 4513/4511)
SO 1203	Sociology of Families	ADS 4633	Livestock Immun. and Disease (Prerequisite: ADS/VS 3014)
WFA SOCIAL SCIENCE ELECTIVES		BIO 3303	Parasitology (BIO 1134)
AEC 2713	Intro to Food & Resource Econ	BIO 3504	Comparative Anatomy (BIO 1134, BIO 1144)
EC 2113	Prin of Macroeconomics (SO)	BIO 4433	Principles of Virology
EC 2123	Prin of Microeconomics (SO)	BIO 4514	Animal Physiology (10 hrs Bio Sci & Org Chem)
EC 4043	Survey of Economics (SR)	PO 4033	Diseases of Poultry
GR 2013	Human Geography	PO 4324	Avian Reproduction
PS 1113	American Government	VS 3014	Anatomy and Physiology
PS 1313	Intro to International Relations		
SO 1003	Intro to Sociology		

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WLFS PROFESSIONAL ELECTIVES		COMPUTER APPLICATION ELECTIVES	
WFA	Any Upper-Level WFA Course	WFA 4123	Wildlife and Fisheries Biometrics (ST 3123, C or better in MA 1613)
BCH 4503	Science Communication Skills	WFA 4253	Application of GIS in WF (SR)
BIO 2503	Environmental Quality (any BIO course)	AEC 1223	Computer Applications for Ag & Life Sciences
BIO 3113	Marine Biology (BIO 1134)	FO 3103	Computer Applications in Forest Resources
BIO 3303	Parasitology (BIO 1134)	GR 2313	Maps & Remote Sensing
BIO 4113	Evolution (MA 1313, BIO 1134, BIO 1144, BIO 3103)	GR 3303	Survey of Geospatial Tech. (GR 2313)
BIO 4143	Population Genetics (BIO 1134, BIO 1144)	TECH 1273	Computer Applications
BIO 4233	Living with Global Change	TKB 2123	Intro to Database Mgt (TKT 1273 or BIS 1012)
BIO 4603	Ethnobotany (BIO 1134, BIO 1144)	NATURAL RESOURCE POLICY ELECTIVES	
BIO 4703	Avian Diversity (BIO 1134, BIO 1144)	WFA 4363	W&F Admin and Comm (JR)
CO 4323	Mass Media-Society	FO 4343	Forest Admin & Org (JR)
CVM 4180	Emergency Prep Animal Health (3 hrs max)	FO 4353	Natural Resource Law (JR)
EPP 4154	General Entomology	FO 4413	Natural Resource Policy (SR)
FO 3113	For Recreation Management	PS 4743	Environmental Policy (PS 1113, PS 2703)
FO 3203	Forest Fire		
FO 4223	Silviculture (WFA 3133, WFA 4223)		
FO 4221	Silviculture Lab (coreq: FO 4223)		
FO 4313	Spatial Tech in NR Mgt (FO 3015 or GR 2313)		
GG 3603	Intro to Oceanography (GG 1113)		
GG 4523	Coastal Environments (GG 1113)		
GR 3113	Conservation of NR (JR)		
GR 4303	Principles of GIS (JR)		
PHI 4143	Phil of Science		

APPROVED SUBSTITUTIONS LIST FOR WILDLIFE, FISHERIES AND AQUACULTURE SCIENCE CONCENTRATION

Required Courses	Approved Substitution
BIO 3103 Genetics	BIO 4143 Population Genetics (BIO 1134, BIO 1144)
MA 1613 Calc. Bus/Life Science	MA 1713 Calculus I
WFA 4263 Wildlife Diseases	ADS 4633 Immunology and Diseases in Large Livestock BIO 3303 Parasitology PO 4033 Diseases of Poultry BIO 4433 Principles of Virology
WFA 4173 Fish Physiology	CVM 4134 Aqua Anim Health Mgt. (BIO 3304, Physiology)