SEAS SCHOOL FOR ENVIRONMENT AND SUSTAINABILITY
UNIVERSITY OF MICHIGAN

Conservation Ecology

Requirements		Notes	Course	Credits	Term
Conservation Ecology Core	*EAS 507 – Interpreting Research in Conservation Ecology		507	3	W
	3 Conservation Ecology Core specialization courses selected in consultation with your advisor	9-12 credits			
SEAS Core	EAS 510 (Social Systems Core)				
	IAMS Requirement Two courses; 3CR minimum Please see 3rd page for approved courses.				
Electives	Electives	Must be a graduate level course at 400-level and above			
Analytics	Analytics	EAS 538 (or equivalent) plus one additional analytics course Check analytics list for acceptable courses.			
Opus or Non-Opus	Opus	Option 1: At most 12 credits of EAS 700 (Master's Thesis) At most 6 credit hours of EAS 701 (Master's Project) or EAS 702 (Master's Practicum)			
	Non-Opus	Option 2: 6-8 credits of CE approved courses. See advisor for non-opus guidance.			
TOTALS	**TOTAL "EAS" CREDIT HOURS**	**Minimum 25 of 42 credit hours**			
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- EAS 507 is not required for students admitted prior to Fall 2019

Conservation Ecology Courses

EAS 409/ENV 409/EEB 487	Ecology of Fishes
EAS/ENV/EEB 430	Soil Ecology
EAS/ENV/EEB 436	Woody Plants
EAS 447	Forest Ecology Management
EAS/EEB 451	Biology of Mammals
EAS 476/ENV 476/EEB 476	Ecosystem Ecology
EAS 501	Ecological Restoration Applications
EAS 501.034	Field Remote Sensing & Analysis (UMBS)
EAS 501.040	Climate Change vs. Everything Else
EAS 501.077	Multivariate statistics for environmental science (starts Fall 2020)
EAS 501.077	The Hydrologic Cycle and Water Resources Management.
EAS 501.123	Conservation and Development
EAS 507	Interpreting Research in Conservation Ecology (Winter)
EAS 524	Agroecosystem Management
EAS 501.025	Science and Management of the Great Lakes
EAS 517	Conservation Biology
EAS 518	Wildlife Ecology & Conservation
EAS 520	Fluvial Ecosystems
EAS 521	Fluvial Ecosystems Lab
EAS 523	Ecological Risk Assessment
EAS 528	Foundations for Sustainable Food Systems
EAS 531	Principles of GIS (Should be taken before EAS 534 or any other SEAS GIS courses)
EAS 534	GIS and Landscape Modeling
EAS 539	Landscape Ecology
EAS 545	Applied Ecosystem Modeling
EAS 541	Remote Sensing
EAS 552	Ecosystem Services
EAS 553	Diverse Farming Systems
EAS 556/EEB 477	Field Ecology
EAS 561	Psychology of Environmental Stewardship
EAS 562	Environmental Policy, Politics and Organizations
EAS 563	International Environmental Policy
EAS 570	Environ Econ: Quantitative Methods and Tools
EAS 578	Urban Stormwater
EAS 589	Ecological Restoration
EAS 592/URP 542	Environmental Planning
EAS 639	Graduate Seminars (e.g. Watershed Planning, Modeling River Environments, etc.)
EARTH 417	Geology of the Great Lakes
EARTH 449	Marine Geology
EARTH 477/ENVIRON 479	Hydrogeology
ENVIRON 463	Michigan Fishes in Changing Environments (UMBS)
CEE 520	Physical Processes of Land-Surface Hydrology
CEE 521	Flow in Open Channels
CEE 522	Sediment Transport
CEE 527	Coastal Hydraulics
CEE 624	Restoration Concepts
CLIMATE 401/EARTH 401	Geophysical Fluid Dynamics
EEB 442	Biology of Insects (UMBS)
EEB 445	Biogeography
EEB 453	Mammalogy (UMBS)

EEB 457	Algae in Freshwater Systems (UMBS)
EEB 463	Neotropical Plants
EEB 468	Biology of Fungi
EEB 470	Microbial Diversity
EEB 472	Plant-Animal Interactions
EEB 483	Freshwater Ecosystems
EEB 485	Population and Community Ecology
EEB 486	Biology and Ecology of Fishes (UMBS)
EEB 498	Agroecosystems
EEB 556	Field Botany of Northern Michigan (UMBS)

Integrated Analytic Methods and Skills Requirement

Students are required, at some point during their time enrolled in the program, to take 2 courses composing at least 3 credits from a faculty-approved list of courses that focus on integrative analytic methods and skills. The faculty-approved existing courses that satisfy this requirement are listed below:

Fall

447 – Forest Ecology Management
501 – Ecological Restoration Applications
501.077 - Multivariate statistics for environmental science (starts 2020)
523 – Ecological Risk Assessment
530 - Decision-Making for Sustainability
531 – Principles of GIS
533 – Negotiation Skills
536 – Mediation Skills
552 – Ecosystem Services
553 – Diverse Farming Systems
564 – Localization Seminar
567 – Social Vulnerability & Adaptation to Environ Change
572 – Environmental Impact Assessment
570 – Environmental Economics
576 – Sustainability Finance
578 – Urban Stormwater (2 yr cycle)
597 – Environmental Systems Analysis
677 – Climate Adaptation Seminar
687 – Landscape Planning

Winter

501 – Science and Management of the Great Lakes
501- The Hydrologic Cycle and Water Resources Management.
541 – Remote Sensing
545 - Applied Ecosystem Modeling (Winter B)
549 – Analysis and Modeling of Ecological Data
550 – Systems Thinking for Sustainable Development
557 – Industrial Ecology
569 – Stakeholder Network Analysis)
581 – Advanced Education for Environment and Sustainability
589 – Ecological Restoration
610 – Advanced LCA Methods and Software Tools
641 – Interdisciplinary Research Methods
787 – Metro Studio (MLA only)