

2020-2021 Advising Checklist
B.S. Environmental Science: Physical Science Option
 College of Natural Resources

Name: _____ Student ID: _____ Advisor: _____

Course (prerequisite classes; notes)

First Year – Fall Semester	CR	GR	Sem
ENVS 101 – Intro Environmental Science	3		FS
ENVS 102 – Field Activities (EnvS 101 pre-req or co-req)	1		FS
ENGL 101 – Introduction to College Writing (sufficient standardized test score)	3		FS
MATH 108 – Intermediate Algebra	3		FS
ISEM 101 – Integrated Seminar	3		FS
OR			FS
^General Education Requirement			FS
^General Education Requirement	3		FS
Total Credits	16		

First Year – Spring Semester	CR	GR	Sem
BIOL 114 – Organisms & Environments	4		FS
COMM 101 – Fund of Public Speaking OR COMM 233 – Interpersonal Communication	2-3		FS
ENGL 102 – College Writing & Rhetoric (ENGL 101)	3		FS
MATH 143 – Pre-Calc Alg & Analy Geom. (Math 108)	3		FS
^General Education Requirement	3		FS
Total Credits	15		

Second Year – Fall Semester	CR	GR	Sem
STAT 251 – Stat. Methods (Math 108 or higher) OR STAT 301 – Probability & Stats (MATH 175)	3		FS
CHEM 111/111L – General Chemistry I (C or better in CHEM 101/L, MATH 143 or MATH 160 or 170)	4		FS
Breadth Elective – Ecology	3		FS
^General Education Requirement	3		FS
Total Credits	13		

Second Year – Spring Semester	CR	GR	Sem
ENVS 225 – Int. Enviro Issues (Rec prep: ENVS 101)	3		S
CHEM 112/112L – General Chemistry II (CHEM 111/L)	5		FS
Breadth Elective-Human Dimensions	3		FS
^General Education Requirement	3		FS
ISEM 301- Integrated Seminar	1		FS
Total Credits	15		

Third Year – Fall Semester	CR	GR	Sem
ENVS 400 – Seminar	1		FS
PHIL 452 – Environmental Philosophy	3		FS
GEOL 101/L – Physical Geology w/Lab OR GEOL 111/L – Physical Geology for Science Majors w/Lab OR SOIL 205/206 – The Soil Ecosystem (CHEM 101/L) OR GEOG 100/L – Physical Geography w/Lab	4		FS
Breadth Elective – Enviro Policy & Reg	3		FS
Breadth Elective – Technical	3		FS
Total Credits	14		

Third Year – Spring Semester	CR	GR	Sem
ENGL 316 – Environmental Writing (ENGL 102) OR ENGL 317 – Technical Writing (ENGL 102, Jr. standing) OR ENGL 318 – Science Writing (ENGL 102)	3		FS
Breadth Elective – Sustainability & Int.	3		FS
Breadth Elective – Water	3		FS
Breadth Elective – Technical	3		FS
Depth Elective	3		FS
Total Credits	15		

Fourth Year – Fall Semester	CR	GR	Sem
ENVS 497 – Senior Research (Senior Standing; Pre/Co-req ENGL 319 or 317)	2		FS
General Education Requirement	3		FS
Breadth Elective – Technical	3		FS
Depth Elective	3		FS
Depth Elective	3		FS
Total Credits	14		

Fourth Year – Spring Semester	CR	GR	Sem
ENVS 497 – Senior Research (Senior Standing; Pre/Co-req ENGL 319 or 317)	2		FS
Depth Elective	3		FS
Depth Elective	3		FS
Depth Elective	3		FS
Depth Elective	3		FS
Class of your choice	3		FS
Total Credits	14		

This option is available to students wishing to pursue careers in environmental professions such as environmental regulation, land use planning, environmental administration, and as a pre-law program for environmental law.

^General Education Requirements: 18-credit minimum

BREADTH ELECTIVES (see category for credit course req.)	24
Ecology (one course from the following)	CR
BIOL 314 – Ecology & Population Biology (BIOL 114 and BIOL 115/115L; STAT 251 or 301; and MATH 160 or MATH 170) (S)	4
FOR/REM 221, WLF 220 or NR 321– Ecology (Biol 102/Biol 102L or Biol 114 or Biol 115 or PISc 205; or Permission)	3
GEOG 410 – Biogeography (GEOG 100/100L or WLF 220 or FOR/REM 221 or Permission)	3
Environmental Policy & Regs (one course from the following)	CR
AIST 314 – Tribal Sovereignty & Federal Policy	3
AIST 421 – Native American Natural Resource Law	3
ENVS 479 – Intro to Environmental Regulations (F)	3
ENVS 577 – Law, Ethics & the Environment (NRS 235, POLS 364 & permission)	3
IS 322 – International Environmental Organizations	3
NRS 311-Public Involvement in NR Management	3
NRS/POLS 364 – Politics of the Environment	3
NRS/POLS 462 – Natural Resource Policy	3
Human Dimensions (one course from the following)	CR
AgEc 451 –Applied Environ and Nat'l Resource Economics (AgEc 301, AgEc 302, or ECON 385; or Permission)	3
AIST 344 – Indigenous Ways of Knowing	3
ANTH/SOC 465 – Environment, Policy & Justice	3
HIST 424 – American Environmental History	3
ECON 272 – Foundations of Economic Analysis	3
GEOG 345 – Global Economic Geography	3
NRS 235 – Society & Natural Resources	3
NRS 383 – NR & Ecosystem Serv. Econ. (NRS 235, ECON 202)	3
SOC 350 – Food, Culture & Society	3
Water (one course from the following)	CR
ASM 315 – Irrigation Systems & Water Mgmt (SOIL 205, MATH 160/170, or permission)	3
BE 453 – NW Climate and Water Resources Change (STAT 301)	3
ENVS/SOIL 450 – Environmental Hydrology (MATH 170)	3
ENVS 446 – Drinking Water and Human Health (S/Alt)	3
FISH 415 – Limnology (STAT 251, FOR 221/WLF 220)	4
FOR 462 – Watershed Science & Mgmt (MATH 143, PHYS 100/L or PHYS 111/L)	3
GEO 309 – Ground Water Hydrology (GEO 101/L, MATH 143)	3
Sustainability & Integration (one course from the following)	CR
ENVS 415 – Environmental Lifecycle Assessment	3
ENVS 428 – Pollution Prevention (F)	3
ENVS 484 – History of Energy	3
ENVS 485 – Energy Efficiency & Conservation	3
FS 436 – Principles of Sustainability (Jr standing)	3
GEOG 435 – Climate Change Mitigation	3
ENVS 386 – Social-Ecological Systems	3
REM 456 – Integrated Rangeland Management (ENGL 313 or 317)	3
Technical (choose three courses from the following)	CR
BIOL 115/115L – Cells & the Evolution of Life w/lab (CHEM 101/L)	4
BIOL 250 – General Microbiology (BIOL 115, CHEM 101/L)	3
BIOL 483 – Mammalogy (BIOL 114, BIOL 115)	3
BIOL 489 – Herpetology (BIOL 114, BIOL 115)	4
CHEM 253/254 – Quantitative Analysis & Lab (CHEM 112) (F)	4
CHEM 275 – Carbon Compounds (CHEM 101, 111, or Permission)	3
CHEM 277 – Organic Chemistry I (CHEM 112)	3
ENVS 498 – Internship	1-3
FOR/NRS 472 – Remote Sensing of the Environment	3
GEOG 301 – Meteorology (GEOG 100/L, PHYS 100/L, MATH 143) (F)	3
GEOG 313 – Global Climate Change (F)	3
GEOG 385 – GIS Primer OR NRS 375-Sp. Analysis for NR Mgmt	3
GEOG 401 – Climatology (GEOG 301, GEOG 313) (S/Alt)	3
GEO 483 – Remote Sensing/GIS Integration (GEOG 385 or equiv)	3
GEO 361 – Geology & the Environment (GEO 101/L, MATH 143)	3
MATH 175 – Analytic Geometry & Calc II (MATH 170)	4
PHYS 111/L – General Physics I (MATH 143)	4
PHYS 112/L – General Physics II (PHYS 111/L) (S)	4
PHYS 211/L – Engineering Physics I (Pre/Co-req: MATH 170)	4
PHYS 212/L – Engineering Physics II (PHYS 211/L) (S)	4
SOIL 205 – Soil Ecosystem (CHEM 101 or CHEM 111)	3
WLF 482 – Ornithology (BIOL 114, BIOL 115)	4

DEPTH ELECTIVES (Select four electives from two areas)	15
Water	CR
ENVS 446 – Drinking Water and Human Health (S/Alt)	3
ENVS 450 – Environmental Hydrology (MATH 170) (S)	3
FOR 462 – Watershed Science and Management (MATH 143 and PHYS 100/L or 111/L) (S)	3
GEO 309 – Groundwater Hydrology (GEO 101/L and MATH 130 or 143 with a C or better)	3
GEO 410 – Techniques of Groundwater Study (MATH 143 with C or better; Pre- or Co-req: GEO 309)	3
HYDR 412 – Environmental Hydrology (GEO 309)	3
Hazardous Waste	CR
BE 433 – Bioremediation (BIOL 115/L and MATH 170)	3
BE 452 – Environmental Water Quality (BE 355, CHEM 112/L, and SOIL 205 or BIOL 250)	3
BIOL 380 – Biochemistry I (CHEM 112/L and CHEM 277) (F)	3
CHEM 418 – Environmental Chemistry (CHEM 253, 254, and 275 or 277) (S)	3
ENVS 479 – Intro to Environmental Regulations (F)	3
FS 409 – Principles of Environmental Toxicology	3
Geology	CR
GEO 335 – Geomorphology (GEO 101/L or 102/L or 111/L; and MATH 143 with a C or better)	3
GEO 361 – Geology and the Environment (GEO 101/L or 111/L; and MATH 143 with a C or better)	3
GEO 422 – Principles of Geophysics (MATH 143 with C or better)	3
GEO 423 – Principles of Geochemistry (GEO 249)	3
Mathematics and Statistics	CR
MATH 175 – Calculus II (MATH 170 with C or better)	4
MATH 275 – Calculus III (MATH 175)	3
MATH 310 – Ordinary Differential Equations (MATH 175)	3
STAT 431 – Statistical Analysis (STAT 251, 301 or 416)	3
Soils	CR
CHEM 418 – Environmental Chemistry (CHEM 253, 254, and 275 or 277)	3
SOIL 415 – Soil and Environmental Physics (F/Alt)	3
SOIL 422 – Environmental Soil Chemistry (F/Alt)	3
SOIL 454 - Pedology	3
Economics and Management (take all 3 courses)	CR
OM 378 – Project Management	3
ECON 385 – Environmental Economics (ECON 202 or 272)	3
ENVS 428 – Pollution Prevention (F)	3
Geospatial Tools (take at least 3 of the 4 courses)	CR
FOR 472 – Remote Sensing of the Environment	3
GEOG 385 – GIS Primer	3
GEOG 424 – Hydrologic Applications of GIS & Remote Sensing (GEOG 385 or equivalent)	3
GEOG 483 – Remote Sensing/GIS Integration (GEOG 385 or equivalent)	3
Climate Change and Emissions Reduction	CR
ENVS 485 – Energy Efficiency & Conservation	3
GEOG 411 – Natural Hazards & Society	3
GEOG 313 – Global Climate Change (F)	3
GEOG 401 – Climatology (S/Alt)	3
GEOG 435 – Climate Change Mitigation	3