

College of Sciences

# ENVIRONMENTAL SCIENCE (BS) MAJOR

### NATURAL SCIENCES DEPARTMENT

## ENVIRONMENTAL SCIENCE BACHELOR OF SCIENCE MAJOR CHECKLIST 2018-2019

This checklist aids in placement of students into their major coursework and documents the department evaluation of transferred credit and course waivers, based on coursework listed on the Degree Audit Report (DARs). A student must complete General Education and Liberal Studies (GELS) along with other graduation requirements for graduation. Refer to your DARs for further details. All coursework for the major must be completed with the grade of C- or better.

Student Name	Metro State ID #	Admission Date or Semester
Advisor Name	Evaluation Date	Declaration Date or Semester

#### MATH & PRE-MAJOR FOUNDATION COURSES: 16 CREDITS

Each foundation science course must include at least one semester credit of professionally supervised, onground laboratory experience with standard undergraduate laboratory equipment and materials. Note that Math foundation courses are pre-requisites that do not count toward major credit totals.

Course #	Title	Transfer Equivalent Details	Grade	Credits	Term
MATH 115 OR MATH 120 OR Placement	College Algebra OR Precalculus				
BIOL 111	General Biology I				
BIOL 112	General Biology II				
CHEM 111	General Chemistry I				
CHEM 112	General Chemistry II				

#### CORE REQUIREMENTS FOR MAJOR: 15-21 CREDITS

#### *Lower-division core requirements*

Course #	Title	Transfer Equivalent Details	Grade	Credits	Term
GEOL 118	Environmental Geology			4	

Course #	Title	Transfer Equivalent Details	Grade	Credits	Term
PHYS 110 OR PHYS 211 and 212	Introduction to Physics OR Calculus Based Physics I and II			4-10	
MATH 208 OR STAT 201	Applied Calculus OR Statistics I			4	
ECON 202	Microeconomics			3	

## **UPPER-DIVISION CORE COURSES: 18-19 CREDITS**

Select one course or set of courses in each of the three core categories.

#### **BIOLOGICAL SCIENCE COURSE OPTIONS – SELECT ONE**

Course #	Title	Transfer Equivalent Details	Grade	Credits	Term
BIOL 310	Ecology			5	
BIOL 312	Evolution			5	
BIOL 316	Behavioral Ecology			5	

#### PHYSICAL SCIENCE COURSE OPTIONS 5 CREDITS

Course #	Title	Transfer Equivalent Details	Grade	Credits	Term
CHEM 311 & 311L	Environmental Chemistry and lab			5	
GEOL 314	Earth Surface Environments			5	

#### ECONOMICS/POLITICAL SCIENCE COURSE 4 CREDITS

Course #	Title	Transfer Equivalent Details	Grade	Credits	Term
ECON 311	Economics of the Environment			3	

#### INTEGRATED ENVIORNMENTAL SCIENCE COURSE OPTIONS 4-5 CREDITS

Course #	Title	Transfer Equivalent Details	Grade	Credits	Term
ESCI 305	Earth's Climate: Past and Future			4	
BIOL or ESCI 315	Limnology			5	
BIOL or ESCI 320	Ecosystem and Global Ecology			5	

An additional 10-11 credits of upper-division courses chosen from the list of core courses above and the list of elective courses below. A minimum of three credits must be at the 400-500 level.

Course #	Title	Grade	Credits	Term	Course #	Title	Grade	Credits	Term
BIOL 415	Pollution Ecology		3		ESCI 350I	Internship Environmental Science		1-4	
BIOL 416	Invasion Biology		3		ESCI 469	Seminars in Environmental Science		1	
BIOL 418	GIS for Natural Sciences		3		ESCI 479	Advance Topics in Environmental Science		1-5	
BIOL 511H	Honors Freshwater Ecology and Quality		3		ESCI 489	Senior Research in Environmental Science		1-5	
BIOL 512H	Honors Insect Ecology and Management		3		GEOL 340	Water Resources		3	
BIOL 513H	Honors Wetland Ecology		3		STAT 353	Environmental Statistics		4	
BIOL 514H	Honors Forest Ecology		3		WRIT 375 or WRIT 575	Environmental Communication		4	

# ADDITIONAL NOTES, CREDIT TOTALS OR COMMENTS:

Academic advisor notes:

# GRADUATION REQUIREMENTS

Major Requirements Checklist	In Progress	Completed
56 Major credits		
25 Metro State Major Credits		
25 Upper Division Major (300 or higher)		

University Requirements Checklist	In Progress	Completed
120 Total Credits (minimum)		
30 Metro State Credits		
40 Upper Division (300 or higher)		
48 credits GELS +RIGR	See DARs for details	

# NATURAL SCIENCES DEPARTMENT CONTACT INFORMATION

For specific questions about this major program or equivalencies of prior coursework at other institutions, contact the Chair of the Natural Sciences Department at: Email: natural.sciences@metrostate.edu Web: <u>www.metrostate.edu/natural-sciences</u> Tel: 651-793-1515



#### METROPOLITAN STATE UNIVERSITY

College of Sciences 700 East Seventh Street Saint Paul, MN 55106-5000 Tel: 651-793-1606 Email: COS@metrostate.edu

Web: www.metrostate.edu/COS



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