# Hydrology and Water, Climate, Energy, and Global Issues

Created using checksheet for students graduating in calendar year 2022

Updated April 25, 2022

## FIRST YEAR

# FALL SEMESTER

Class Number	Class Name	Hours	Requirement
Pathways 1 Foundational Course (Select from University Approved List)		3	Pathways 1f
WATR 2004	Water, Environment, and Society	3	Core
MATH 1225	Calculus of a Single Variable <sup>1</sup>	4	Pathways 5f
AAEC 1005	Economics of Food & Fiber 2 *	3	Pathways 3
Pathways Concept 2 Course (Select from University Approved List) 3		3	Pathways 2

Total Credits 16

# FIRST YEAR

# SPRING SEMESTER

Class Number	Class Name	Hours	Requirement
Pathways 1 Foundational Course (Select from University Approved List)		3	Pathways 1f
BIOL 1106	Principles of Biology	3	Pathways 4
BIOL 1116	Principles of Biology Lab	1	Major
MATH 1226	Calculus of a Single Variable <sup>4</sup>	4	Pathways 5f
AAEC 1006	Economics of Food & Fiber <sup>2</sup>	3	Pathways 3
Pathways Concept 2 Course (Select from University Approved List) <sup>3</sup>		3	Pathways 2

Total Credits 17

# SECOND YEAR

## **FALL SEMESTER**

Class Number	Class Name	Hours	Requirement
CHEM 1035	General Chemistry	3	Pathways 4
CHEM 1045	General Chemistry Lab	1	Major
PHYS 2205	General Physics	3	Core
PHYS 2215	General Physics Lab	1	Major
GEOG 2084	Principles of Geographic Information Systems (Option for Major Requirement) 5	3	Major
Pathways Concept 7 Course (Select from University Approved List)		3	Pathways 7

Total Credits 14

### SECOND YEAR

### SPRING SEMESTER

Class Number	Class Name	Hours	Requirement
PHYS 2206	General Physics **	3	Restricted Elective
GEOS 1004	Earth Science: Our Past, Present, and Future *	3	Restricted Elective
FREC 2124	Forests, Society, and Climate	3	Water Policy Specialization (Water, Climate, Energy, and Global Issues)
Free Elective		3	Free Elective
Pathways Concept 6 Course (Select from University Approved List) <sup>6</sup>		3	Pathways 6

Total Credits 15

## Hydrology and Water, Climate, Energy, and Global Issues

Created using checksheet for students graduating in calendar year 2022

Updated April 25, 2022

#### THIRD YEAR

### **FALL SEMESTER**

Class Number	Class Name	Hours	Requirement
ENGL 3534	Literature and the Environment (Option for Pathway 1a) <sup>5</sup>	3	Pathways 1a
ENSC 3604	Fundamentals of Environmental Science *	3	Core
CEE 3104	Introduction to Environmental Engineering	3	Water Science Specialization (Other) 5
UAP 4374	Land Use & Environment: Planning & Policy	3	Water Policy Specialization (Other) 5
Restricted Elective		3	Restricted Elective

Total Credits 15

#### THIRD YEAR

### SPRING SEMESTER

Class Number	Class Name	Hours	Requirement
FREC/WATR 3104	Principles of Watershed Hydrology	3	Core
AAEC 3314	Environmental Law (Option for Major Requirement) <sup>5</sup>	3	Major
CSES/GEOG/GEOS 3304	Geomorphology	3	Water Science Specialization (Hydrology) 5
CSES/ENSC 3134	Soils in the Landscape *	3	Restricted Elective
GEOG 3104	Environmental Problems, Population, & Development	3	Water Policy Specialization (Water, Climate, Energy, and Global Issues)

Total Credits 15

#### **FOURTH YEAR**

### **FALL SEMESTER**

Class Number	Class Name	Hours	Requirement
FREC/WATR 3754	Watersheds and Water Quality Monitoring	3	Core
FREC/AAEC/WATR 4464 Water Resources Policy & Economics		3	Core
FREC 4354	Forest Soil and Watershed Management	3	PW5a <sup>7</sup> and Water Science Specialization (Other) <sup>5</sup>
Restricted Elective		3	Restricted Elective
Free Elective		3	Free Elective

Total Credits 15

#### **FOURTH YEAR**

#### SPRING SEMESTER

Class Number	Class Name	Hours	Requirement
ALS/NR/WATR 4614	Watershed Assessment, Management, and Policy	2	Core
GEOS 4804	Groundwater Hydrology	3	Water Science Specialization (Hydrology) 5
GEOG/GEOS 4134	Interdisciplinary Issues and Ethics in Water Resources	3	Water Policy Specialization (Water, Climate, Energy, and Global Issues)
Pathways Concept 6	Course (Select from University Approved List) <sup>6</sup>	3	Pathways 6
Free Elective		1	Free Elective
Free Elective		3	Free Elective

Total Credits 15

122 Hours

 $\ensuremath{^*}$  Classes noted with  $\ensuremath{^*}$  are prerequisites as follows:

MATH 1226 is a prerequisites for GEOS 4804

GEOS 1004 is a prerequisite for GEOS 3304

AAEC 1005 is a prerequisite for WATR/FREC 4464

ENSC 3604 is a prerequisite for WATR/FREC 3754

CSES 3134 is a prerequisite for FREC 4354

<sup>&</sup>lt;sup>1</sup> Students can choose MATH 1025 (3 credits) or MATH 1225 (4 credits)

<sup>&</sup>lt;sup>2</sup> Students can choose AAEC 1005/1006 Economics of the Food & Fiber or ECON 2005/2006 Principles of Economics

<sup>&</sup>lt;sup>3</sup> FREC 2254 or HIST 3144 are recommended Pathways 2 Courses for WRPM students

<sup>&</sup>lt;sup>4</sup> Students can choose MATH 1026 (3 credits) or MATH 1226 (4 credits)

<sup>&</sup>lt;sup>5</sup> Students can choose from approved list on checksheet

<sup>&</sup>lt;sup>6</sup> FREC 4554 Creating the Ecological City is a recommended Pathways 6 Course for WRPM Students

FREC 3004 or FREC 4354 are recommended Pathways 5a Courses for WRPM students

<sup>\*\* 6</sup> credits of physics are a requirement for federal entry-level hydrology jobs.