

# SUSTAINABLE WATER MANAGEMENT DEGREE REQUIREMENT WORKSHEET – 2021-2022

Updated: July 7, 2021

Program Leader: Erum Sattar

*\*This is NOT an Official Transcript or Record\**

Student Name: \_\_\_\_\_

Academic Advisor: \_\_\_\_\_

Prior to the start of classes each semester, obtain approval of your course selection following meeting with your Academic Advisor.

Required Fall 2021 Course Enrollment Approval: \_\_\_\_\_ Date: \_\_\_\_\_

Required Spring 2022 Course Enrollment Approval: \_\_\_\_\_ Date: \_\_\_\_\_

## SWM-MS Degree Semester Hour Units (SHUs) Requirement: A minimum of 30

**IMPORTANT TO NOTE:** Any courses listed below without the “NSWM” subject code will require online cross-registration via [SIS](#) during registration.

### Complete Prior to First Semester:

[Training in Protection of Human Subjects \(CITI\) Degree Requirement \(complete prior to first semester\):](#) The hardcopy of your completed CITI Coursework Requirements Report PDF (Social and Behavioral Research modules) with score and expiration date listed needs to be filed in your academic file folder and fulfillment of this requirement needs to be recorded in SIS by [Friedman’s Registrar](#). **CITI Requirement Fulfilled:** YES or NO

**Graduating Semester - Approval of Intent to Graduate:** In order for a Friedman degree to be awarded, approval by the faculty (SWM Academic Advisor and SWM Program Director) is a requirement for Friedman’s Dean to approve and for the Board of Trustees of Tufts University to approve the official degree conferral.

*SWM students must complete this Degree Requirement Worksheet (associated with their admittance semester) and obtain required approvals in their spring semester for their intent to graduate in their summer semester upon completion of their Summer Practicum requirement. Once approvals are obtained (email approval is accepted in lieu of handwritten signature), submission of the approved worksheet prior to Spring Break in March 2022 to [Friedman’s Registrar](#) is required for graduation.*

Based on my review of this worksheet and the student’s transcript it appears that this student will have met their requirements for Summer 2021 graduation:

Academic Advisor Approval: \_\_\_\_\_

Date: \_\_\_\_\_

Program Director Approval: \_\_\_\_\_

Date: \_\_\_\_\_

Course #	Course Title	SHUs	Offered	Semester/Year Enrolled Mark “E” for Exemption	Grade
<b>CORE COURSES – REQUIRED FOR ALL SWM STUDENTS (15 SHUs):</b>					
CEE 0293.04	Special Topics: Environmental Statistics	3	Fall		
CEE 0293.03	Special Topics: Sustainable Water Management (first of two semester-sequenced seminar course)	1	Fall		
NSWM 0XXX	Special Topics: Sustainable Water Management II (second of two semester-sequenced seminar course)	2	Spring		
NSWM 0200	Water Science and Systems Analysis	3	Fall		
NSWM 0203	Water Leadership Impact Management	3	Spring		
NSWM 0205	Water: Economics, Law, Negotiation and Policy	3	Spring		
<b>SUMMER PRACTICUM - REQUIRED-FOR ALL SWM STUDENTS (3 SHUs):</b>					
NSWM 0298	Sustainable Water Management Practicum	3	Summer		
<b>Students are required to select ONE of the four Track Options listed below and complete the courses associated with the Track.</b>					
<b>**IMPORTANT:</b> If a course listed below is not available for cross-registration or if you have identified an equivalent substitute course, you must obtain advanced approval via email from your Track Leaders prior to submitting a cross-registration request via SIS. Per their approval, if your cross-registration request is successfully processed, please use the provided blank rows in your Track section to list the approved substitute course.					
<b>TRACK OPTION 1: WASH IN INTERNATIONAL DEVELOPMENT AND HUMANITARIAN RESPONSE (12 SHUs):</b>					
<b>Required Courses (6 SHUs):</b>					
NUTR 0229	Humanitarian Action in Complex Emergencies - cross-listed with Fletcher; DHP D230	3	Fall		
NUTR 0497	ENV 0027: Public Health Engineer - Do not use SIS to enroll; complete a Directed Study Course Proposal form with Dr. Erum Sattar as the faculty sponsor and Dr. Danielle Lantagne as the informal faculty sponsor; contact Friedman’s Registrar for the form and to be enrolled.	3	Spring		
<b>Select TWO Elective Courses (6 SHUs):</b>					
NUTR 0231	Fundamentals of GIS - contact Friedman Registrar to be enrolled via SIS due to time-conflict with NSWM 0200: Water Science and Systems Analysis in the fall.	3	Fall/Spring		
CEE 0156	Biostatistics plus Lab	4	Spring		
CEE 0158	Occupational and Environmental Health	3	Spring		
CEE 0159	Water, Sanitation, and Hygiene (WASH) Design	3	Fall		
CEE 0187	Geographical Information Systems plus Lab	4	Fall		
CEE 0214	Environmental and Water Resource Systems	3	Spring		

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**Name:** \_\_\_\_\_

Course #	Course Title	SHUs	Offered	Semester/Year Enrolled Mark "E" for Exemption	Grade
<b>Select TWO Elective Courses (6 SHUs) (continued):</b>					
NUTR 0204	Principles of Epidemiology	3	Fall		
NUTR 0217	Monitoring and Evaluation of Nutrition and Food Security Projects	3	Spring		
NUTR 0222/DHP D232	Gender, Culture, and Conflict in Human Emergencies	3	Fall		
NUTR 0231	Fundamentals of GIS - contact Friedman Registrar to be enrolled via SIS due to time-conflict with NSWM 0200: Water Science and Systems Analysis in the fall.	3	Fall/Spring		
NUTR 0324/DHP D213	International Humanitarian Response - Enrollment limited to 15 students.		To be confirmed for spring		
NUTR 0327	Sustainable Diets and Food Consumption	3	Fall		
CEE 0251/CH 0191	Biology of Water and Health	3	Fall		
ES 0100	Actionable Engineering Diplomacy	3	Fall		
UEP 0232/DLS 0275	Intro to GIS	3	Fall/Spring		
<b>TRACK OPTION 2: WATER INFRASTRUCTURE FOR HUMAN SETTLEMENTS (12 SHUs):</b>					
<b>Required Course (3 SHUs):</b>					
CEE 0214	Environmental and Water Resource Systems	3	Spring		
<b>Select THREE Elective courses in total with at least ONE course from List # 1 and from List # 2 (9 SHUs):</b>					
<b>LIST # 1: Water Science</b>					
NUTR 0231	Fundamentals of GIS - contact Friedman Registrar to be enrolled via SIS due to time-conflict with NSWM 0200: Water Science and Systems Analysis in the fall.	3	Fall/Spring		
CEE 0112	River Hydraulics and Stream Restoration	3	Spring		
CEE 0152	Environmental Health Data-Lab	3	Fall		
ILO L223	International Environmental Law	3	Fall		
UEP 0232/DLS 0275	Intro to GIS	3	Fall/Spring		
CEE 0251/CH 0191	Biology of Water and Health	3	Fall		
<b>LIST # 2: Water and Infrastructure Policy and Planning</b>					
NUTR 0231	Fundamentals of GIS - contact Friedman Registrar to be enrolled via SIS due to time-conflict with NSWM 0200: Water Science and Systems Analysis in the fall.	3	Fall/Spring		
CEE 0111/ENV 0112	Hydrology of the Built Environment	3	Fall		
ES 0100	Actionable Engineering Diplomacy	3	Fall		
UEP 0206	Planning for Low-Impact Development	3	Spring		
UEP 0221	Climate Change Policy, Planning and Action	3	Spring		
UEP 0232/DLS 0275	Intro to GIS		Fall/Spring		
UEP 0264	Green Urban Design	3	Fall		
UEP 0279	Water Resources Policy and Planning and Watershed Management	3	Fall		
<b>TRACK OPTION 3 - WATER DIPLOMACY (12 SHUs):</b>					
<b>Required Course:</b>					
ES 0100	Actionable Engineering Diplomacy	3	Fall		
<b>Select THREE Elective courses in total with at least ONE course from List # 1 and from List # 2 (9 SHUs):</b>					
<b>LIST # 1 – Economics Policy-Diplomacy</b>					
DHP D205	Global Maritime Affairs	3	Spring		
DHP D223	Theories of Conflict and Conflict Resolutions	3	Fall		
DHP P252	Global Water Security Perspectives	3	Spring		
DHP P253	Sustainable Development Diplomacy	3	Spring		
DHP P255	International Energy Policy	3	Spring		
EIB B252	Corporate Social Responsibility in the Age of Globalization	3	Spring		
UEP 0293.14	Special Topics: Energy Policy	3	Fall		

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**Name:** \_\_\_\_\_

Course #	Course Title	SHUs	Offered	Semester/Year Enrolled Mark "E" for Exemption	Grade
<b>LIST # 2 – Analytical Methods</b>					
NUTR 0231	Fundamentals of GIS - contact Friedman Registrar to be enrolled via SIS due to time-conflict with NSWM 0200: Water Science and Systems Analysis in the fall.	3	Fall/Spring		
NUTR 0394	Advanced Data Analysis	3	Fall		
CEE 0214	Environmental and Water Resource Systems	3	Spring		
DHP P250	Environmental Problem Solving	3	Fall		
UEP 0230	Negotiation, Mediation, and Conflict Resolution	3	Fall		
UEP 0279	Water Resources Policy and Planning and Watershed Management	3	Fall		
<b>TRACK OPTION 4: WATER, FOOD, AND ENERGY (12 SHUS):</b>					
<b>Select FOUR Elective Courses (12 SHUs):</b>					
NUTR 0203	Fundamentals of Nutrition Policy and Programming: How Science & Practice Interact	3	Fall		
NUTR 0215/UEP 0223	Fundamentals of U.S. Agriculture	3	Fall		
NUTR 0227	International Nutrition Programs	3	Fall		
NUTR 0231	Fundamentals of GIS - contact Friedman Registrar to be enrolled via SIS due to time-conflict with NSWM 0200: Water Science and Systems Analysis in the fall.		Fall/Spring		
NUTR 0233	Agricultural Science and Policy I (prerequisite: NUTR 0215)	3	Spring		
NUTR 0327	Sustainable Diets and Food Consumption	3	Fall		
NUTR 0XXX	Political Agroecology	3	Fall		
NUTR 0497	Directed Study: Sustainability on the Farm - Do not use SIS to enroll; complete a Directed Study Course Proposal form with Dr. Erum Sattar as the faculty sponsor - contact Friedman's Registrar for the form and to be enrolled.	3	Fall		
NUTR 0256	Climate Change: Risk and Adaptation for Food Systems and Beyond	3	Fall		
CEE 0112	River Hydraulics and Stream Restoration	3	Spring		
CEE 0120	Clean Energy Engineering – Offshore Wind	3	Fall		
CEE 0152	Environmental Health Data-Lab	3	Fall		
CEE 0251/CH 0191	Biology of Water and Health	3	Fall		
ES 0100	Actionable Engineering Diplomacy	3	Fall		
UEP 0232/DLS 0275	Intro to GIS	3	Fall		
UEP 0279	Water Resources Policy and Planning and Watershed Management	3	Fall		
UEP 0293	Special Topics: Energy Policy	3	Fall		