

**NATURAL RESOURCE MANAGEMENT & SUSTAINABILITY MAJOR (Water & Soil Resources Area of Emphasis)  
COURSE SEQUENCE--FALL ENTRY (Fall 2018-Fall 2019)**

FALL 2019		
<b>FANR 3000</b>	<b>Field Methods</b>	<b>4</b>
prereq: Enrollment in Warnell prof program		
	<b>F: 72 TR</b>	<b>07-08F+(M or 74-76T)</b>
	<b>S: 03 MW</b>	<b>07-08F+(M or 74-76T)</b>
<b>FANR 3060</b>	<b>Soils and Hydrology</b>	<b>4</b>
prereq: Chemistry I		
	<b>F: 04 MWF</b>	<b>W, R: var.</b>
	<b>S: 04 MWF</b>	<b>W, R: var.</b>
<b>FANR 3300</b>	<b>Economics of Ren. Resources</b>	<b>2</b>
1st half	<b>F: 71 TR</b>	<b>01-02 F</b>
of term	<b>S: 73 TR</b>	<b>05-06 F</b>
<b>FANR 3400</b>	<b>Society and Natural Res.</b>	<b>2</b>
2nd half	<b>F: 71 TR</b>	<b>01-02 F</b>
of term	<b>S: 73 TR</b>	<b>05-06 F</b>
<b>REQUIRED OPTION, ELECTIVE, or PHYSICS 3</b>		
<b>TERM TOTAL: 15</b>		

FALL 2020		
<b>GEOL 4220</b>	<b>Hydrogeology</b>	<b>3</b>
prereq: none		
	<b>F: 74 TR</b>	
<b>REQUIRED OPTION, ELECTIVE, or PHYSICS 3</b>		
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<b>TERM TOTAL: 15</b>		

All non-Warnell course times are subject to change without notice.

SPRING 2020		
<b>FANR 3200W</b>	<b>Ecology of Natural Res.</b>	<b>4</b>
prereq: Biology II		
	<b>F: 03 MWF</b>	<b>M, F</b>
	<b>S: 71 TR</b>	<b>T, R</b>
<b>FANR 3800</b>	<b>Spatial Analysis</b>	<b>3</b>
prereq: FANR 3000		
	<b>F: 01 MW</b>	<b>W, R</b>
	<b>S: 05 MW</b>	<b>W, R</b>
<b>WASR 4110</b>	<b>Forest Hydrology</b>	<b>4</b>
prereq: FANR 3060		
	<b>S: 01 MWF</b>	<b>T</b>
<b>REQUIRED OPTION, ELECTIVE, or PHYSICS 4</b>		
<b>TERM TOTAL: 15</b>		

SPRING 2021		
<b>CRSS 4670</b>	<b>Environmental Soil Chemistry</b>	<b>3</b>
prereq: FANR 3060		
	<b>S: 72 TR</b>	
<b>FANR 4500S or 4990R</b>	<b>Senior Project or Senior Thesis</b>	<b>4</b>
pre or coreq: FANR 3300, final semester		
	<b>F: 3:30-4:30 R or var.</b>	
	<b>S: 01 M or var.</b>	
<b>FANR 4800W</b>	<b>Renewable Resource Policy</b>	<b>2</b>
prereq: Economics and senior standing		
	<b>S: 03 MW</b>	
<b>REQUIRED OPTION, ELECTIVE, or PHYSICS 3</b>		
<b>REQUIRED OPTION, ELECTIVE, or PHYSICS 3</b>		
<b>TERM TOTAL: 15</b>		

CLASS PERIODS:	
<b>01</b>	8:00-8:50a
<b>02</b>	9:05-9:55a
<b>03</b>	10:10-11:00a
<b>04</b>	11:15-12:05p
<b>05</b>	12:20-1:10p
<b>06</b>	1:25-2:15p
<b>07</b>	2:30-3:20p
<b>08</b>	3:35-4:25p
<b>09</b>	4:40-5:30p
<b>10</b>	5:45-6:35p
<b>11</b>	6:50-7:40p
<b>12</b>	7:55-8:45p
<b>13</b>	9:00-9:15p
<b>71</b>	8:00-9:15a
<b>72</b>	9:30-10:45a
<b>73</b>	11:00-12:15p
<b>74</b>	12:30-1:45p
<b>75</b>	2:00-3:15p
<b>76</b>	3:30-4:45p
<b>77</b>	5:00-6:15p
<b>78</b>	6:30-7:45p
<b>79</b>	8:00-9:15p
<b>80</b>	9:30-10:45p
<b>VR</b>	various times
<b>AR</b>	to be arranged

TERMS:	
<b>F:</b>	Fall
<b>S:</b>	Spring
<b>SU:</b>	Summer

**Hours Needed to Graduate:  
60**

Underneath each course title, you will find listed the term, the class period and days meeting for the lecture, and the day(s) the labs are offered, separated by a comma for separate sections. Assume the labs are in the afternoon (periods 06 or 75 or later), unless otherwise noted.

**NATURAL RESOURCE MANAGEMENT & SUSTAINABILITY MAJOR (Water & Soil Resources Area of Emphasis)  
COURSE SEQUENCE--FALL ENTRY (continued)**

**OPTIONS & ELECTIVES:**

<b>REQUIRED OPTION #1</b>		
<b>CRSS 4600</b>	<b>Soil Physics</b>	<b>4</b>
prereq:	FANR 3060, Calculus, & Physics I	
also online	S: 05 MWF 74-75 R	
<b>WASR 4500</b>	<b>Quant. Methods in Hydrology</b>	<b>3</b>
prereq:	FANR 3060	
	F: 72 TR	
<b>REQUIRED OPTION #2</b>		
<b>CRSS 4540</b>	<b>Pedology</b>	<b>3</b>
prereq:	FANR 3060	
	S: 03 MWF 07-09 M	
^req'd for cert as soil classifier in Georgia		
<b>GEOG 3010</b>	<b>General Geomorphology</b>	<b>3</b>
prereq:	none	
	F: 73 TR	

<b>REQUIRED OPTION #3</b>		
<b>CRSS 4610</b>	<b>Soil Microbiology</b>	<b>3</b>
prereq:	none	
	F: 02 MW 06-07 F	
<b>EHSC 4310</b>	<b>Environmental Microbiology</b>	<b>4</b>
prereq:	MIBO 3000 or 3500	
	S: 72 TR 06-08 W	
<b>WASR 4310</b>	<b>Freshwater Ecosystems</b>	<b>4</b>
prereq:	FANR 3200W	
	F: 02 MWF 06-08 M	

<b>COMPUTER PROGRAMMING OPTION</b>		
<b>CSCI 1301</b>	<b>Intro to Computing</b>	<b>4</b>
prereq:	Precalculus	
	F: 72, 73, 74, or 75 TR*	
	S: 72, 73, 74, or 75 TR*	
	SU: also offered	
^many labs are offered at various times		
<b>CSCI 1360</b>	<b>Informatics &amp; Data Analytics</b>	<b>4</b>
prereq:	Precalculus	
	S: 76 TR 08 W	
<b>CSCI 2150</b>	<b>Intro to Computational Science</b>	<b>4</b>
prereq:	Precalculus	
even years	S: 72 TR 08 MW or 73 TR	
<b>FANR 4700</b>	<b>Computational Plant Science</b>	<b>3</b>
prereq:	STAT 2000 or BIOS 2010	
	S: AR	

<b>PHYSICS I</b>		
<b>PHYS 1111</b>	<b>Physics I</b>	<b>4</b>
prereq:	Precalculus	
	F: 06 MWF	various
	F: 07 MWF	various
	F: 72 TR	various
	F: 73 TR	various
	S: 06 MWF	various
	S: 07 MWF	various
	SU: also offered	

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<b>Water &amp; Soil Resources Electives (9 hrs)</b>		
<b>CRSS 2010</b>	<b>Crop Science</b>	<b>3</b>
prereq:	none	
<b>CRSS 3540</b>	<b>Soil Morphology &amp; Interp.</b>	<b>1-3</b>
prereq:	permission of department	
<b>CRSS 4540</b>	<b>Pedology</b>	<b>3</b>
prereq:	FANR 3060	
<b>CRSS 4580</b>	<b>Soil Erosion &amp; Conservation</b>	<b>3</b>
prereq:	FANR 3060	
<b>CRSS 4600</b>	<b>Soil Physics</b>	<b>3</b>
prereq:	FANR 3060, Calculus, and Physics I	
<b>CRSS 4610</b>	<b>Soil Microbiology</b>	<b>3</b>
prereq:	none	
<b>EHSC 4310</b>	<b>Environmental Microbiology</b>	<b>4</b>
prereq:	MIBO 3000 or 3500	
<b>EHSC 4350</b>	<b>Environmental Chemistry</b>	<b>3</b>
prereq:	Organic Chemistry I & Precalculus	
pre or coreq:	STAT 2000 or BIOS 2010	
<b>EHSC 4490</b>	<b>Environmental Toxicology</b>	<b>3</b>
prereq:	Organic Chemistry I & Biology II	
<b>EHSC 4610</b>	<b>Water Pollution &amp; Health</b>	<b>3</b>
prereq:	FANR 3060	
<b>FORS 3010</b>	<b>Dendrology</b>	<b>3</b>
prereq:	Biology II	
	F: 73 TR	T, W, R
	S: 72 TR	T, W, R
<b>GEOG 3010</b>	<b>General Geomorphology</b>	<b>3</b>
prereq:	none	
<b>GEOG 4060</b>	<b>Field Mthds: Monitor &amp; Assess</b>	<b>3</b>
prereq:	none	
<b>GEOG 4300</b>	<b>Data Science in Geography</b>	<b>3</b>
coreq:	none	
<b>GEOG 4330</b>	<b>Aerial Photos &amp; Interp</b>	<b>3</b>
prereq:	none	
<b>GEOG 4350</b>	<b>Remote Sensing of Envir.</b>	<b>3</b>
prereq:	GEOG 4330	
<b>GEOL 3010</b>	<b>Earth Materials</b>	<b>4</b>
prereq:	Chemistry I	
<b>GEOL 3020</b>	<b>Surficial &amp; Near-Surf. Proc.</b>	<b>4</b>
prereq:	GEOL 1121 or 1250	
pre or coreq:	GEOL 1122 or 1260	
<b>GEOL 4110</b>	<b>Principles of Geochemistry</b>	<b>3</b>
prereq:	Chemistry II & GEOL 3010	
<b>WASR 3000+</b>	<b>any 3000+ WASR course</b>	<b>var.</b>
prereq:	various	
<b>WASR 3900</b>	<b>WASR Internship</b>	<b>3</b>
prereq:	apply before internship on Warnell site	
	SU: VR	
^only 3 hrs of 3900 can count towards graduation		
<b>WASR 4000</b>	<b>Forest Soil Management</b>	<b>3</b>
prereq:	FANR 3060	
odd years	S: 71 TR 75-76 R	
<b>WASR 4310</b>	<b>Freshwater Ecosystems</b>	<b>4</b>
prereq:	FANR 3200W	
	F: 02 MWF 06-08 M	
<b>WASR 4500</b>	<b>Quant. Methods in Hydrol.</b>	<b>3</b>
prereq:	FANR 3060	
	F: 72 TR	
<b>WASR 4660</b>	<b>Hydrogeochem. Characteriz.</b>	<b>3</b>
prereq:	Chemistry II and FANR 3060	
	S: AR	
<b>WASR 4700L</b>	<b>Hydrol., Geol., &amp; Soils of GA</b>	<b>3</b>
prereq:	apply through StudyAway portal	
	SU: VR (Maymester)	
or other, advisor-approved course		

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