

Natural Resource Management and Sustainability (Water and Soil Resources)

Fall Entry - Fall 2020 to Fall 2021

| Fall 1 | | Hours |
|---|--|-----------|
| FANR 3000 - Field Methods | | 4 |
| prereq Enrollment in Warnell prof program | | |
| S: | 03 MW 06-09 M, 07-08 F; 74-76 T, 07-08 F | |
| F: | 72 TR 06-09 M, 07-08 F; 74-76 T, 07-08 F | |
| FANR 3060 - Soils & Hydrology | | 4 |
| prereq Chemistry I | | |
| S: | 04 MWF 06-07 W; 08-09 W; 71-72 R; 73-74 R; 75-76 R | |
| F: | 04 MWF 06-07 W; 08-09 W; 71-72 R; 73-74 R; 75-76 R | |
| FANR 3300 and 3400 - Economics & Society | | 4 |
| 3300+D - first half of term; 3400+D - last half | | |
| FANR 3300 - Economics | | 2 |
| S: | 73 TR 05-06 F | |
| F: | 03 MW 02-03 F | |
| FANR 3400 - Society | | 2 |
| S: | 73 TR 05-06 F | |
| F: | 03 MW 02-03 F | |
| WASR Required Option, Elective, or Physics | | 3 |
| F: | VR | |
| Total Hours: | | 15 |

| Spring 1 | | Hours |
|--|-------------------------|-----------|
| FANR 3200W - Ecology | | 4 |
| prereq Biology II | | |
| S: | 71 TR 75-76 R; 75-76 T | |
| F: | 03 MWF 06-09 F; 06-09 M | |
| WASR 4110 - Forest Hydrology | | 4 |
| prereq ENGR 3410 or FANR 3060 or GEOL 4220 or GEOG 4030 or ECOL 3520 or CRSS 3050 or CRSS 4600 | | |
| S: | 01 MWF 75-76 T | |
| FANR 3800 - Spatial Analysis | | 3 |
| pre or coreq FANR 3000, FORS 4050, PRTM 4700, or WILD 4110 | | |
| S: | 05 MW 06-09 W; 74-77 R | |
| F: | 01 MW 06-09 W; 75-77 R | |
| WASR Required Option, Elective, or Physics | | 4 |
| S: | VR | |
| Total Hours: | | 15 |

| Fall 2 | | Hours |
|--|-------|-----------|
| GEOL 4220 - Hydrogeology | | 3 |
| F: | 74 TR | |
| WASR Required Option, Elective, or Physics | | 3 |
| F: | VR | |
| WASR Required Option, Elective, or Physics | | 3 |
| F: | VR | |
| WASR Required Option, Elective, or Physics | | 3 |
| F: | VR | |
| WASR Required Option, Elective, or Physics | | 3 |
| F: | VR | |
| Total Hours: | | 15 |

| Spring 2 | | Hours |
|---|-------|-----------|
| CRSS 4670 - Environmental Soil Chemistry | | 3 |
| prereq CRSS 3060 or FANR 3060 | | |
| S: | 72 TR | |
| FANR 4500S or 4990R - Senior Project or Thesis | | 4 |
| Choose between Senior Project or Senior Thesis. Students taking Senior Thesis must take at least 1 hour of 4990R, plus an additional three hours from 4960R, 4970R, 4980R, and/or 4990R | | |
| FANR 4500S - Senior Project | | 4 |
| pre or coreq FANR 3300, FORS 4700, FISH 5360, or WILD 4100; final semester | | |
| S: | 01 M | |
| F: | 76 R | |
| FANR 4990R - Senior Thesis | | 4 |
| prereq final semester; apply on Warnell website | | |
| S: | VR | |
| F: | VR | |
| FANR 4501 - Senior Project I | | 1 |
| pre or coreq FANR 3300, FORS 4700, FISH 4300, or WILD 4100 | | |
| S: | 71 T | |
| F: | 01 F | |
| FANR 4502S - Senior Project II | | 3 |
| prereq FANR 4501 | | |
| S: | VR | |
| F: | VR | |
| FANR 4800W - Policy | | 2 |
| prereq Economics and senior standing | | |
| S: | 03 MW | |
| WASR Required Option, Elective, or Physics | | 3 |
| S: | VR | |
| WASR Required Option, Elective, or Physics | | 3 |
| S: | VR | |
| Total Hours: | | 15 |

Pre-requisites and class times for non-Warnell courses are subject to change without notice.

Major hours needed to graduate: 60

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

| TERMS | F | S | SU |
|-------|------|--------|--------|
| | fall | spring | summer |

Natural Resource Management and Sustainability (Water and Soil Resources)

Fall Entry - Fall 2020 to Fall 2021

| Elective Options | | Hours |
|---|--|--|
| PHYS 1111 - Introductory Physics I | | |
| Choose one Physics I course (4+ hours) | | |
| PHYS 1111 - Intro Physics Mechanic | | 4 |
| prereq | Precalculus | |
| S: | 04 MWF; 05 MWF; 72 TR | 01-02 F; 01-02 M; 01-02 W; 03-04 F; 03-04 M; 07-08 M; 07-08 W; 09-10 W; 11-13 M; 71-72 R; 71-72 T; 73-74 R; 73-74 T; 75-76 T |
| SU: | 02 MTWRF | 05-06 MW; 74-75 TR |
| F: | 05 MWF; 06 MWF; 08 MWF; 73 TR | 01-02 F; 01-02 W; 03-04 M; 03-04 W; 09-10 W; 71-72 R; 71-72 T; 75-76 T; 77-78 R; 77-78 T |
| PHYS 1211 - Prin Physics for Scie Engr La | | 4 |
| prereq | Calculus | |
| S: | 07 MWF; 73 TR; 75 TR | 03-04 W; 05-06 M; 77-78 R; 77-78 T |
| SU: | 04-05 MTWRF | 07-09 MW |
| F: | 02 MWF; 03 MWF; 04 MWF; 07 MWF | 05-06 M; 05-06 W; 09-10 M; 71-72 R; 74-75 R |
| PHYS 1311 - Adv Introductory Physics I La | | 4 |
| prereq | MATH 2250; pre or coreq: MATH 2260 | |
| S: | 72 TR | 09-10 M |
| Required Option #1 | | |
| Choose one course (3+ hours) | | |
| WASR 4500 - Quantitative Methods/Hydrol. | | 3 |
| prereq | ENVE 4435 or FANR 3060 or WASR 4110 or GEOL 4220 or GEOG 4030 or CRSS 4600 | |
| S: | 02 MWF | |
| F: | 72 TR | |
| CRSS 4600 - Soil Physics | | 4 |
| prereq | FANR 3060 and Calculus and Physics I | |
| S: | 04 MWF | 74-75 R |
| Required Option #2 | | |
| Choose one course (3+ hours) | | |
| CRSS 4540 - Pedology | | 3 |
| prereq | FANR 3060 | |
| S: | 03 WF | 06-08 M |
| GEOG 3010 - General Geomorphology | | 3 |
| F: | 73 TR | |
| Required Option #3 | | |
| Choose one course (3+ hours) | | |
| FISH 4310 - Freshwater Ecosystems | | 4 |
| prereq | Ecology | |
| F: | 02 MWF | 06-08 M |
| CRSS 4610 - Soil Microbiology | | 3 |
| F: | 02 MW | 06-07 F |
| EHSC 4310 - Environmental Microbiology | | 4 |
| prereq | MIBO 3000 or 3500 | |
| S: | 72 TR | 06-08 M; 06-08 W |
| Computer Programming Elective | | |
| Choose one course (3+ hours) | | |
| PBIO 4700 - Computational Plant Science | | 3 |
| pre or coreq | STAT 2000 or BIOS 2010 | |
| S: | 04-06 W | |

| | | |
|--|---|---|
| FANR 3700 - Nat Res Data Processing | | 3 |
| S: | 05 MWF | |
| CSCI 1301 - Intro Computing and Program | | 4 |
| prereq | Precalculus | |
| S: | 72 TR; 73 TR; 75 TR; 76 TR | 01 MW; 02 MW; 03 MW; 04 MW; 05 MW; 06 MW; 07 MW; 08 MW; 72 TR; 73 TR; 75 TR; 76 TR |
| SU: | 03 MT, 04 MTW | 05 MWF; 06 MWF |
| F: | 71 TR; 72 TR; 73 TR; 74 TR; 75 TR; 76 TR | 01 MW; 02 MW; 03 MW; 04 MW; 05 MW; 06 MW; 07 MW; 08 MW; 71 TR; 72 TR; 73 TR; 74 TR; 75 TR; 76 TR; 77 TR |
| CSCI 1360 - Informatics & Data Analytics | | 4 |
| prereq | Precalculus | |
| F: | 73 TR, 04 M | |
| CSCI 1360E - Foundations of Informatics | | 4 |
| prereq | Precalculus | |
| SU: | VR | |
| CSCI 2150 - Computational Science | | 4 |
| prereq | Precalculus | |
| odd years S: | 72 TR; 76 TR | 08 MW; 72 TR; 73 TR; 74 TR |
| WASR Electives | | |
| Choose 9 hours with your faculty mentor | | |
| FANR 5950 - Special Topics in FANR | | 1-4 |
| prereq | open enrollment or permission of instructor, depending on topic | |
| S: | VR | |
| S: | VR | |
| S: | VR | |
| F: | VR | |
| F: | VR | |
| FISH 4310 - Freshwater Ecosystems | | 4 |
| prereq | Ecology | |
| F: | 02 MWF | 06-08 M |
| FORS 3010 - Dendro | | 3 |
| prereq | Biology II | |
| S: | 72 TR | 06-09 W; 74-76 R; 74-76 T |
| F: | 73 TR | 06-09 W; 74-76 R; 74-76 T |
| WASR 3900 - WASR Internship | | 3 |
| prereq | apply before internship through Warnell site | |
| S: | VR | |
| F: | VR | |
| WASR 4000 - Forest Soil Management | | 3 |
| prereq | CRSS 3050 or FANR 3060 | |
| odd years S: | 71 TR | 75-76 R |
| WASR 4110 - Forest Hydrology | | 4 |
| prereq | ENGR 3410 or FANR 3060 or GEOL 4220 or GEOG 4030 or ECOL 3520 or CRSS 3050 or CRSS 4600 | |
| S: | 01 MWF | 75-76 T |
| WASR 4400 - Wetlands | | 3 |
| odd years S: | 04 MW | 06-08 W |
| WASR 4500 - Quantitative Methods/Hydrol. | | 3 |
| prereq | ENVE 4435 or FANR 3060 or WASR 4110 or GEOL 4220 or GEOG 4030 or CRSS 4600 | |
| S: | 02 MWF | |
| F: | 72 TR | |
| WASR 4660 - Envir Field Site Characteriz | | 3 |

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

| TERMS | F | S | SU |
|-------|------|--------|--------|
| | fall | spring | summer |

Natural Resource Management and Sustainability (Water and Soil Resources)

Fall Entry - Fall 2020 to Fall 2021

| | | |
|--------------|---|-----|
| prereq | Chemistry II and FANR 3060 | |
| | S: 06-08 WF | |
| | WASR 4700L - Hydrology Field Study | 3 |
| prereq | Permission of instructor | |
| | SU: May; VR | |
| | CRSS 2010 - Crop Science | 3 |
| | VR | |
| | CRSS 3540 - Soil Morphology and Interpret | 1-3 |
| prereq | Permission of department | |
| | VR | |
| | CRSS 4540 - Pedology | 3 |
| prereq | FANR 3060 | |
| | S: 03 WF 06-08 M | |
| | CRSS 4580 - Erosion and Conserv | 3 |
| prereq | FANR 3060 | |
| | VR | |
| | CRSS 4600 - Soil Physics | 4 |
| prereq | FANR 3060 and Calculus and Physics I | |
| | S: 04 MWF 74-75 R | |
| | CRSS 4610 - Soil Microbiology | 3 |
| | F: 02 MW 06-07 F | |
| | EHSC 4310 - Environmental Microbiology | 4 |
| prereq | MIBO 3000 or 3500 | |
| | S: 72 TR 06-08 M; 06-08 W | |
| | EHSC 4350 - Environmental Chemistry Lab | 3 |
| pre or coreq | Statistics | |
| | S: 07 MW 02-04 M; 08-10 M | |
| | F: 07 MW 08-10 M; 08-10 W | |
| | EHSC 4490 - Environ Toxicology | 3 |
| prereq | CHEM 2211 and Biology II | |
| | F: 73 TR | |
| | GEOG 3010 - General Geomorphology | 3 |
| | F: 73 TR | |
| | GEOG 4300 - Intro Spatial Analy | 3 |
| | F: 74 TR | |
| | GEOG 4330 - Ap Image Interp Lab | 3 |
| | F: 02 MW 02 F | |
| | GEOG 4350 - Remote Sensing of Environment | 3 |
| prereq | GEOG 4330 | |
| | F: 72 T 72 R | |
| | GEOL 3010 - Earth Materials Lab | 4 |
| prereq | Chemistry I | |
| | F: 05 MW 06-08 MW | |
| | GEOL 3020 - Surficial Near-Surf Proc Lab | 4 |
| prereq | GEOL 1121 or 1250; pre or co: GEOL 1122 or 1260 | |
| | F: 72 TR 75-77 T | |

Pre-requisites and class times for non-Warnell courses are subject to change without notice.

Major hours needed to graduate: 60



| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|------------|-------------|---------------|---------------|-------------|------------|------------|------------|------------|-------------|---------------|----------------------|------------|
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| TERMS | F | S | SU |
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| | fall | spring | summer |