

# COLLEGE OF NATURAL RESOURCES MINORS

Catalog 2021-22

**Captive Wildlife Minor – at least 30 credits** This minor is open to majors in the CNR or Biology only. Students with majors in other areas must first meet with the coordinator for the captive wildlife minor to be considered.

- Students must complete BIOL 130 and BIOL 160 (or BIOL 101 if majoring in Resource Management: Environmental Education and Interpretation, B.S. or Resource Management: Wildlife Education, B.S.) prior to admittance.
- Students must declare and be admitted to the minor before completion of 70 credit hours toward graduation.
- BIOL 333 or BIOL 362; BIOL 381; WLDL 458 or NRES 458; PHIL 360; WLDL 321, 322, 355
- Take one of the following: BIO 386 or WATR 386; BIOL 388 or PSYC 388; BIOL 477, 498; WLDL 305, 332, 334, 361, 365
- WLDL 382: Internship (3 credits) involving captive wildlife with prior approval of internship coordinator.
- 6 credits from: WLDL 372; WLDL 450 or NRES 320 or NRES 368

#### **Conservation Biology Minor – 23-25 credits**

- BIOL 305; NRES 324 or NRES 457; NRES 458 or WLDL 458; NRES 459; NRES 372 or ECON 342
- One course from: POLI 304, 305; NRES 394, 473, 474, 484
- One course from: BIOL 342, 355; FOR 332
- One course from: BIOL 361 or WATR 361; BIOL 367, 374, 376, 377, 378; FOR 426; WATR 488; WLDL 372

#### **Conservation Law Enforcement Minor – Complete one track**

- Credentialed enforcement track, 30 credits:
  - NRES 320, 392, 473; SOC 230 or POLI 212
  - NRES 393 (720 hour recruit school 15 credits)
  - o 3 credits from: FOR 335, 394; WATR 382 or PSEN 382 or WSTE 382; WLDL 360, 372, 458
- Non-credentialed (regulatory and law) track, 27 credits:
  - o NRES 320, 392, 473; SOC 230 or POL 212; POL 304 or 305; PHIL 315 or 380
  - o 6 credits from: GEOL 330; SOIL 461; WSTE 382 or PSEN 382 or WATR 382; WSTE 476

# **Environmental Communication Minor – 25 credits** Only open to CNR majors. Others may request permission from CNR Associate Dean for Academic Affairs.

- NRES 320, 368, 369
- 15 credits from: MSTU 221, 253, 322; COMM 230, 394; ENGL 354

**Environmental Education/Interpretation Minor – 27-30 credits** Open only to CNR majors and biology majors. Others may request special permission from the CNR Associate Dean for Academic Affairs.

- NRES 150, 301, 302 (or NRES 310 and 405), 368, 369, 374, 376, 478
- Electives: 3-6 credits from field courses selected in consultation with your adviser

#### Environmental Education Minor for Teachers- 22 credits Open only to students seeking teacher certification.

Enrollment caps are in effect for those seeking teacher certification. Please contact the Wisconsin Center for Environmental Education early for entrance requirements and application procedures. Also, see information about the Professional Education Program and the secondary education curriculum for teacher certification in the Education section in the catalog.

- NRES 370, 376
- 3 credits from: NRES 281, 302 (or NRES 310 and 405), 305, 368, 478
- 9 credits from: ASTR 100; BIOL 100; CHEM 100; GEOG 105
- 3 credits from: BIOL 305; HIST 280; NRES 200; NRES 220 or WATR 220; NRES 324 or WATR 324; NRES 369, 441; PHIL 380, course from core above or other courses approved by adviser

#### **Forest Ecology and Health Minor – 21 credits**

- FOR 232, 324, 332, 336, 424, 426
- Two courses from: FOR 431; NRES 324 or WATR 324; NRES 457, 458, 459

#### Forest Management Minor – 19 credits

- FOR 232, 322, 332, 425, 432
- FOR 321 or MATH 255

#### Forest Recreation Minor – 18-20 credits

- FOR 334, 335, 394, 480, 485
- One course from: FOR 331, 385, 444
- One course from: NRES 281, 305, 368, 369, 392

#### International Resource Management Minor - Minimum of 21 credits for CNR majors (min. 31 credits for others)

- NRES 323
- 3 credits from: NRES 406, 407, 475; FOR 493; INTL 300, 310, 381, 391; or another study abroad program approved by International Resource Management (IRM) advisor
- Complete one foreign language course beyond the second semester (102) college level or participation in an intensive language study abroad program or internship with approval of IRM adviser.
- One course from: PSYC 240; SOC 270, 320, 327, 343, 355, 370
- One course from: ECON 342, 362, 365; NRES 372
- One course from: GEOG 115, 120
- 3 credits from: ANTH 325; BIO 353; GEOG 317, 303; HIST 204; NRES 340, 408, 440, 460; PHIL 380
- Non-CNR majors are also required to take: NRES 150, 151; 250 or 251

## **Resource Management Minor – 23 credits**

- NRES 150, 151, 250, 251, 388 or 473, 474
- Select remaining credits from CNR courses numbered 300 & above

## Soil Science Minor - 22 credits with at least 15 credits of soils courses

- NRES 251
  - 9 credits from: SOIL 362\*, 364, 365; SOIL 384 or 484 or WSTE 484; SOIL 461, 465
    - Forestry majors may substitute Soils 361 for one of these.
- Select remaining credits from: FOR 332, 435; GEOG 312 or GEOL 312; GEOG 341; GEOL 370; GEOL 383 or WATR 383; GEOL 487 or WATR 487; NRES 336, 373\*\*, 484; SOIL 359, 360, 361, 362, 363, 364, 365; SOIL 366 or WATR 366; SOIL 368; SOIL 384 or 484 or WSTE 484; SOIL 461; SOIL 462 or WATR 462; SOIL 465; SOIL 479 or WSTE 479; SOIL 482 or WSTE 482; SOIL 486 or WSTE 486; WATR 360 or WLDL 360; WATR 493; WLDL 451; WSTE 380, WSTE 476; or other courses approved by the Associate Dean
  - \* <u>SOIL 362</u> is necessary for students applying for soil scientist positions with federal agencies.
  - \*\*<u>NRES 373</u> has satisfied the crop science requirement for a soil conservationist position with the Natural Resources Conservation Service.
  - The soil science minor satisfies the minimum civil service requirements for soil scientist positions (classification and mapping) in federal agencies such as the Natural Resources Conservation Service and the Forest Service.
  - Whether you are a major or minor, check with a soils adviser to determine the minimum core course requirements you need for certification as a professional and/or to take state or national exams or to obtain licenses.

#### Sustainable Energy Minor – 21 credits

- ECON 111 or NRES 372
- 3 credits from: GEOG 120; NRES 150, 365; PHIL 101, 336; POLI 101, 160, 180, 304, 305; SOC 101, 355
- 3 credits from: BIOL 101, 130, 160; CHEM 101, 105, 106, 117; GEOL 100, 104; NRES 151
- GEOG 308 or GEOL 308 or NRES 220 or WATR 220 or NRES 441; NRES 200, 341, 442

#### Waste Resources Minor – 18 credits

- NRES 251; PSEN 215
- 2 courses from: WSTE 380; WSTE 382 or WATR 382 or PSEN 382; WSTE 476
- Select remaining credits from: PSEN 382 or WATR 382 or WSTE 382; PSEN 420; PSEN 489 or WSTE 489; SOIL 365; SOIL 384 or SOIL 484 or WSTE 484; SOIL 387 or WSTE 387; SOIL 479 or WSTE 479; SOIL 482 or WSTE 482; SOIL 486 or WSTE 486; WATR 390, 454, WSTE 380, 381, 476, 481, 485

#### Water Resources Minor – 23 credits

• GEOG 341; MATH 255; NRES 251; WATR 388, 389, 390; and 3 credits in other Water courses not already listed

# Wildlife Minor – 19-22 credits

- NRES 250; WLDL 458 or NRES 458; WLDL 450 or WLDL 451
- One course from: BIOL 376, 377, 477; WLDL 332, 334, 361, 372
- Choose remaining credits from: FOR 332; NRES 459; WLDL 305, 311, 348, 353, 355, 360, 365, 450, 451