Dual Degree: Fisheries and Wildlife/Forestry (revised Fall 2013)
Minimum 143 credit hours (Does not allow any general elective hours)
NOTE: all classes applied toward the F&W degree require a C- or higher
WI represents Writing Intensive courses (check to confirm each semester)

I. Pre-Professional Core (30 hours)
   A. Communications (3 hours)
      English 1000 Exposition and Argumentation (3) Fall/Spring/Summer
      3 Writing intensive courses [prereq: English 1000] designated “WI” after possible courses. [C− required]
   B. Quantitative / Analytical Skills (9 hours)
      Math 1100 College Algebra (3) Fall/Spring/Summer - waived with ALEKS placement exam score 55% or higher or
         C− or higher in a math course equivalent to Calc I.
      Math 1400 Calculus for Social-Natural Sciences (3) Fall/Spring/Summer [prereq: College Algebra]
      Statistics – choose one:
         • Stat 2530 Statistical Methods in Nat Resources (3) Spring [prereq: College Algebra]
         • Stat 1300 Elementary Statistics (3) Fall/Spring [prereq: College Algebra]
         • Stat 1400 Elementary Statistics for Life Sciences (3) Fall/Spring [prereq: College Algebra]
   C. Social Sciences (9 hours)
      Economics - choose one:
         • Ag Econ 2070 Environmental Economics and Policy (3) Spring [Soph standing required] WI
         • Ag Econ 1041 Applied Microeconomics (3) Fall/Spring
         • Ag Econ 1042 Applied Macroeconomics (3) Spring [prereq: microecon recommended]
      American History or Government - State Law requirement: Choose from History 1100, 1200, 1400, 2100, 2440; or Political Science 1100 or 2100. Fall/Spring/Summer
      Additional Social Sci elective (3) Fall/Spring/Summer – includes Psych, Soc, Rural Soc, Anthro, Hist
   D. Humanities (9 hours) – Fine arts: art, music, or theatre (3 hours of performance courses allowed from
      approved Gen Ed list). Cultural studies: literature [prereq: English 1000], philosophy and ethics, classical
      humanities, religion. Foreign language: must complete 12 hrs of same language.

II. Science Core (34-38 hours)
   Chemistry – Choose one of the options below:
      • Chem 1320 Gen Chem I (4) Fall/Spring/Summer [prereq: college algebra]
      • Chem 1100 Atoms/Molecules (3) Fall/Spring/Sum AND Biochem 2110 Living World (3) Spring
      Biology 1200 Botany (5) Fall/Summer (online)
   Introductory Biology: choose one:
      • Biology 1500 Intro to Biological Systems (5) Fall/Spring [prereq: College Algebra]
      • FW 1100 Introductory Zoology (5) Spring
   Geology 1100 Principles of Geology 1100 (4) OR Geol 1200 Environ Geology (4hr) Fall/Spring/Summer
   Soils 2100 Intro to Soil Science (3) Fall/Spring [prereq: College Algebra] AND Soils 2106 Soil Science Lab (2)
      Fall/Spring [prereq: 3 hrs Chem, or concurrent enrollment in Soils 2100]
   Physics – Choose one:
      • Physics 1210 College Physics (4) Fall/Spring/Summer [College Algebra]
      • AtmSci 1050 Intro Meteorology (3) Fall/Spring
   Genetics - Choose one:
      • FW 2500 Intro Genetics/Evol for Conservation (3) Spring [prereq: Bio 1500 or FW 1100 + Chem]
      • BioSci 2200 General Genetics (4) Fall/Spring [prereq: Biology + Chem 1320]
      • AnSci 3213 Genetics of Agricultural Plants and Animals (3) Spring [prereq: Biology or Zoology]
   Animal Form and Function Course - choose one:
      • MPP 3202 Elements of Physiology (5) Fall/Spring [prereq: 5 hrs. biology or consent]
      • AnSci 3245 Physiology of Domestic Animals (3) Fall [prereq: Bio 1500 or FW 1100 + Chem 1320] AND
         AnSci 3255 Physiology of Domestic Animals Lab (2) Spring [prereq AnSci 3245]
      • MPP 3333 – Elements of Human Physiology (3) Fall [prereq: Bio 1500 or FW 1100]
         AND MPP 3337 Human Physiology Lab (2) Fall [prereq or concurrent: MPP 3333]
      • Bio 3700 Animal Physiology (5) Fall/Spring [prereq: Bio 2300]
      • Bio 2300 Introduction to Cell Biology (4) Fall/Spring [prereq: Bio 2200 + Chem 2100]

III. Professional Core (44-45 hours)
   NatR 1070 Ecology and Renewable Resource Management (3) Spring
   FW 2100 Colloquium in Fisheries and Wildlife (1) Fall
   Public Communication – Choose one:
      • AgEd 2220 Verbal Comm in Ag (3) Fall/Spring
      • Comm 1200 Intro to Speech Communication (3) Fall/Spring/Summer
      • PRT 3231 Principles of Interpretive Outdoor Recreation (3) Spring
   For 2151 Dendrology (4) Fall [Botany]
   NatR 3110 Biometrics (3) Fall [prereq: statistics or instructor’s consent]
   NatR 3290 Hydrologic Measurement Techniques (1) Fall [prereq: Soils 2100; For 2151]
   NatR 4325 Intro to GIS (or equivalent) (3) Spring
For 4320*† Forest Ecology (5) Fall [prereq: For 2151 or Bio 3210] WI
FW 3600 Intro to Conservation Biology (3) Spring [prereq: Bio 3650 or For 4320]
For 4330 Silviculture (3) Spring [prereq: For 2151 and For 4320 or Bio 3650]
NatR 4353 Policy and Administration (3) Spring [prereq: senior standing or consent]
For 4390 Watershed Management and Water Quality (3) Fall
FW 4500 Population Dynamics (3) Spring [prereq: Calculus + Stat + Bio 3650 or For 4320]

IV. Summer Field Studies (5 hours) Must take concurrently [prereq: Soils 2100; For 2151]
For 2541 Forest Utilization (1)
For 2542 Forest Measurement and Inventory (1)
For 2543 Forest Ecology Field Studies (1)
For 2544 Intro to Silviculture and Management (1)
For 2545 Forest Management Planning (1)

V. Professional Track – 30 hours minimum required

Senior Capstone: choose one from F&W and one from Forestry (cannot duplicate in Professional Track; Research and Internship hours accepted by contract only):
- F&W Capstone – FW 4400; 4600; 4700; 4950 Research in F&W
- Forestry Capstone – For 4380*; For 4940 Internship; For 4994 (1 sem) or 4995(2 sem) Senior Honors Research in Forestry

Fisheries and Wildlife – 5 courses minimum

A. Science and Natural History (must take at least 1 Terrestrial and 1 Aquatic and only 1 outside FW)
- FW 2600 Ornithology (4) Spring [prereq: 5 hours biology]
- FW 2700 Ichthyology (4) Spring [prereq: 8 hours biology]
- FW 3660 Mammalogy (4) Spring [prereq: 8 hours biology]
- FW 3900 Ecology of Fishes (3) Spring EVEN yrs [FW 2700 Bio 3650 or For 4320]
- FW 4100 Limnology (3-4) Fall [prereq: Bio 3650 or For 4320]
- BioSci 3360 Herpetology (4) Spring ODD yrs [prereq: 8 hours biology]
- BioSci 3710 Entomology (3) AND BioSci 3715 – Insect Diversity (2 hr) Fall [5 hrs biology]

B. Management – (must take at least 1 Terrestrial and 1 Aquatic)
- FW 2900 Principles of Wildlife Management (4) Fall [NatR 1070 + 5 hr biol]
- FW 4300 Fisheries Management (3) Fall [prereq: Bio 3650 or For 4320 + stat or consent]
- FW 4400 Tech Fish Man/Conserv (3) Fall, WI [Bio 3650 or For 4320; or FW 1100 + stat + FW 2700 or 4300]
- FW 4600 Ecosystems Management (4) Fall, WI [Bio 3650 or For 4320]
- FW 4650 Wildlife Management Planning (4) Spring [prereq: Bio 3650 or For 4320; FW 2900 recommended]
- FW 4700 Wildlife Research & Mgmt Evaluation Methods (4) Spring [prereq: Bio 3650 or For 4320; Stat]

C. Specialty Courses (5th course can come from this list or from A or B)
- FW 3090 International Studies in Conservation (1-5) [approved FW Study Abroad Proposal required]
- FW 4200 Urban Wildlife Management (3) Spring, WI [prereq: Bio 3650 or For 4320]
- FW 4220 Human Dimensions of Conservation (3) Fall ODD yrs [1 policy or manag. course]
- FW 4880 Waterfowl Ecology and Management (3) Spring EVEN [Bio 3650 and FW 2600]

Forestry – 15 credits minimum from the following courses (additional courses accepted with approval):
- For 3207* Forest Fire Control and Use (2) Fall
- For 3212**† Forest Health and Protection (4) Spring ODD yrs [prereq: For 2151 or consent]
- For 3240* Wood Technology (3) Fall odd years
- For 3290 Urban Forestry (2) Spring EVEN yrs [prereq: For 2151 or consent]
- For 4350**† Forest Econ (3) Spring [prereq: Ag Econ 1041 or 3080]
- For 4360* Photogrammetry, Inventory and Models (3) Fall
- For 4375 Forest Stand dynamics (3) Spring ODD yrs
- For 4380**† Forest Resource Management (3) Fall; Cannot duplicate from Capstone

* These courses collectively meet the current requirements for the SAF accredited Forest Resource Management curriculum.
† Required as a minimum for graduates pursuing Certified Forester status, if the accredited curriculum has not been completed.

Wildlife and Fisheries certifications are also possible through this curriculum. See F&W advisor for information.