

## Bachelor of Science in Wildlife and Conservation Biology

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

Semester/Year Entered: \_\_\_\_\_

Adviser: \_\_\_\_\_

The following lists major requirements by number. Each number requires one course only. The sequence provided below is recommended (not required). If you prefer an alternate sequence we suggest you check course prerequisites and discuss the decision with your advisor.

### Freshman

| Req #                       | Semester I (Fall)       |   | Credits |
|-----------------------------|-------------------------|---|---------|
| 1.                          | NR 400                  | Professional Perspectives in Natural Resources          | 1       |
| 2.                          | ENGL 401                | First-Year Writing                                      | 4       |
| 3.                          | NR 433                  | Wildlife Ecology  | 4       |
| 4.                          | BIOL 411 <b>OR</b> 412  | Intro Bio-Mol/Cell <b>OR</b> Intro Bio-Evol/Biodiv/Ecol | 4       |
| 5.                          | NR 425                  | Field Dendrology  | 4       |
| <b>Semester II (Spring)</b> |                         |   |         |
| 6.                          | BIOL 411 <b>OR</b> 412  | Intro Bio-Mol/Cell <b>OR</b> Intro Bio-Evol/Biodiv/Ecol | 4       |
| 7.                          | EREC 411                | Environmental and Resource Economics                    | 4       |
| 8.                          | MATH 424B <b>OR</b> 420 | Calculus for Life Sciences <b>OR</b> Finite Math        | 4       |
| --.                         | Discovery Elective      |   | 4       |

### Sophomore

| Req #                       | Semester I (Fall)                  |  | Credits |
|-----------------------------|------------------------------------|--|---------|
| 9.                          | CHEM 411                           | Chemistry for Life Sciences              | 4       |
| 10.                         | NR 415                             | Natural Resources Field Methods          | 2       |
| 11.                         | NR 527 <b>OR</b> BIOL 541          | Forest Ecology <b>OR</b> General Ecology | 4       |
| 12.                         | ENG 501/502/503/CMN 500 (choose 1) |  | 4       |
| --.                         | Discovery Elective                 |  | 4       |
| <b>Semester II (Spring)</b> |                                    |  |         |
| 13.                         | BMCB 501                           | Biological Chemistry                     | 5       |
| 14.                         | NR 658                             | Introduction to GIS                      | 4       |
| 15.                         | NR 655                             | Vertebrate Biology <b>OR</b>             | 4       |
|                             | NR 712                             | Mammalogy <b>OR</b>                      |         |
|                             | ZOOL 542                           | Ornithology <b>OR</b>                    |         |
|                             | ZOOL 710                           | Ichthyology                              |         |
| --.                         | Discovery Elective                 |  | 4       |

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**Junior**

| <b>Req #</b>                | <b>Semester I (Fall)</b>  | <b>Credits</b> |
|-----------------------------|---|----------------|
| 16.                         | NR 640 Wildlife Population Ecology  | 4              |
| 17.                         | NR 664 Conservation Genetics <b>OR</b><br>ZOO 690 Evolution   | 4              |
| 18.                         | NR 615 Wildlife Habitats <b>OR</b><br>NR 603 Landscape Ecology  | 4              |
| <b>Fall or Spring</b>       |   |                |
| 19.                         | NR 625 Physiological Ecology (Spring) <b>OR</b><br>ZOO 625 Animal Physiology (Fall) <b>OR</b><br>ZOO 613 Animal Behavior (Fall) | 4              |
| 20.                         | BIOL 528 Applied Biostatistics I (Fall or Spring)   | 4              |
| --.                         | Discovery Elective  | 4              |
| <b>Semester II (Spring)</b> |   |                |
| 20.                         | NR 650 Conservation Biology   | 4              |
| 21.                         | NR 602 Natural Resources and Environmental Policy   | 4              |

**Senior**

| <b>Req #</b>                | <b>Semester I (Fall)</b>  | <b>Credits</b> |
|-----------------------------|---|----------------|
| 23.                         | NR740 Inventory and Monitoring of Populations and Communities   | 4              |
| --.                         | Elective (see note below)   | 4              |
| <b>Fall or Spring</b>       |   |                |
| 24.                         | NR 642 Biogeography (Spring even yr) <b>OR</b><br>NR 765 Community Ecology (Spring odd yr) <b>OR</b><br>NR 603 Landscape Ecology (Fall, do not double count with #18) | 4              |
| --.                         | Discovery Elective  | 4              |
| --.                         | Elective (see note below)   | 4              |
| <b>Semester II (Spring)</b> |   |                |
| 25.                         | NR 750 Sustaining Biological Diversity (Capstone course**)  | 4              |
| --.                         | Elective (see note below)   | 4              |

\*\* Can also be met using NR 663 UNH-EcoQuest if taken as a senior or with an independent project

**Discovery Program Requirements**

**Completed**

- |   |       |
|---|-------|
| 1. <u>Writing skills</u> – Met with ENGL 401                              | _____ |
| 2. <u>Quantitative reasoning</u> – Met with MATH 424B, <b>OR</b> MATH 420 | _____ |
| 3. <u>Biological Science/Inquiry</u> – Met with BIOL 411                  | _____ |
| 4. <u>Physical Science</u> - Met with CHEM 411                            | _____ |
| 5. <u>Fine &amp; Performing Arts</u>                                      | _____ |
| 6. <u>Historical Perspectives</u>   | _____ |
| 7. <u>Humanities</u>  | _____ |
| 8. <u>Social Science</u> – Met with EREC 411                              | _____ |
| 9. <u>World Cultures</u> <sup>†</sup>                                     | _____ |
| 10. <u>Environment, Technology &amp; Society</u>                          | _____ |

<sup>†</sup> Study abroad for 1 semester fulfills the foreign culture requirement with 0 credits.

**University Writing Requirements**

All students are required to take ENGL 401 + 3 additional WI courses, at least one of which will be in the major, and at least one of which will be on a 600-level or above.

Writing Intensive (WI) Check List

- 1. ENGL 401: First Year Writing \_\_\_\_\_
- 2. One WI course at any level (e.g., ENGL 501, 502, 503) \_\_\_\_\_
- 3. One WI course at the 600-level or above (e.g., NR 602, NR 615, NR 663, NR 740) \_\_\_\_\_
- 4. One WI course in the student’s major (e.g., NR 506, NR 615, NR 740) \_\_\_\_\_

**ELECTIVES**

The curriculum has open elective courses beyond the requirements for the major and the Discovery Program. Electives provide an opportunity to enroll in advanced courses, explore other departments or programs (e.g., SCUBA, Psychology, Political Science), or prepare for graduate school (e.g., second statistics course). Electives also can be used to complete an academic minor or to fulfill the certification requirements of The Wildlife Society (see below).

**Below we list some suggested elective courses that do not meet another WCB requirement. Where requirements can be met by multiple courses, those courses would also be suitable electives.**

NR 501 – Studio Soils; NR 506 – Forest Entomology; NR 711 – Wetland Ecology and Management; NR 713 – Quantitative Ecology; NR 729 – Silviculture; NR 730 – Terrestrial Ecosystems; NR 734 – Tropical Ecology; NR 751 – Aquatic Ecosystems; NR 757 – Remote Sensing of the Environment; NR 782 – Monitoring Forest Health; ZOOLOGY 610 – Aquaculture; ZOOLOGY 628 – Marine Invertebrate Ecology and Evolution; ZOOLOGY 717 – Lake Ecology; ZOOLOGY 721 – Aquatic Invasives; ; ZOOLOGY 725 – Marine Ecology; ZOOLOGY 745 – Biology and Diversity of Insects; ZOOLOGY 750 – Biological Oceanography; ZOOLOGY 772 – Fisheries Biology

**WILDLIFE SOCIETY CERTIFICATION**

Students who graduate with a BS degree in Wildlife and Conservation Biology may apply for professional certification by The Wildlife Society. To be eligible for certification, students must choose NR 655 (for Req. 15), NR 625 (for Req. 19), and also complete ZOOLOGY 542 or NR 712, plus take one additional communications course (e.g., ENGL 501, ENGL 502, ENGL 503, or CMN 500; do not double-count with course chosen for requirement 12) and one additional physical sciences course (e.g., NR 501, NR 504, NR 716, NR 757, ESCI 401, ESCI 405, ESCI 409, ESCI 501, or PHYS 401). Check with your advisor to determine course eligibility.

**ECOQUEST**

EcoQuest is a field-based study-abroad program in New Zealand run by NREN; semester and summer stays are possible. Students typically participate during their junior year or as a first-semester senior. The semester-long program grants 16 UNH credits that are used to satisfy the following WCB program courses: NR 602, NR 650, NR 740, and a course from the list of suggested electives. In addition, students who participate in a semester-long Ecoquest program will fulfill the World Cultures Discovery requirement (0 cr). Students should meet with the Ecoquest program coordinator for further information and guidance.

**STUDY ABROAD**

Students interested in studying abroad should begin to investigate programs early in the sophomore year. See your advisor for direction and visit the Study Abroad office in Hood House.

**MINORS**

If a student is interested in pursuing a minor, he/she should begin planning and speaking to their advisor during the sophomore year.

## **TRANSFER POLICY**

The W&CB Program accepts transfer students from within and outside of UNH on a “space available” basis. Transfer applicants must have a  $\geq 2.5$  overall GPA. Because the W&CB major has a large number of required courses that are best taken in the planned sequence, we encourage students to discuss transferring before completing their second semester.

Transfer students are expected to complete all program requirements. However, in some instances, it may be possible to substitute a W&CB requirement with an alternative course that has already been taken by the transfer student or substitute a related (yet-to-be taken) course for a requirement if the substitution covers comparable information and facilitates timely progress toward graduation. Such modifications are done on a case-by-case basis.

### **Summary of the process for on-campus transfers:**

1. Contact the Undergraduate Program Coordinator and set-up an initial meeting.
2. At the initial meeting, discuss the “fit” of the W&CB Program and review courses already completed. Transfers may be asked to write a short essay describing why they are leaving their current major to join the W&CB Program and why this is a better fit.
3. Some transfer students may find that completing the W&CB requirements will result in a delayed graduation date, require  $>16$  credits in a term, or require courses to be taken during Jterm or Summer. Be sure to consider and discuss these issues with the Program Coordinator when considering a transfer.
4. If the transfer student has completed less than two semesters ( $<32$  credits) in another program and the W&CB Program is a good fit, it should be possible to map out a group of courses that promptly gets the student on track.
5. If the transfer student has  $>32$  credits in another major, he/she will be expected to develop a path to graduation that satisfies all W&CB Program requirements. The Program Coordinator and assigned advisor will assist with this.
6. The transfer student will complete all required forms necessary to change majors and be responsible for having his/her folder delivered to the Department of Natural Resources and the Environment administrative assistants in James Hall, Room 114. An advisor will not be assigned until the student’s folder is in the departmental office (and RAC numbers are only available from an advisor).