WINONA STATE UNIVERSITY
NEW AND REVISED COURSE AND PROGRAM APPROVAL FORM

Routing form for new and revised courses and programs. Course or Program: BIOL 406 Ornithology

<table>
<thead>
<tr>
<th>Department Recommendation</th>
<th>12/6/13</th>
<th><a href="mailto:ethompson@winona.edu">ethompson@winona.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Chair</td>
<td></td>
<td></td>
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<tr>
<td>Date</td>
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<table>
<thead>
<tr>
<th>Dean's Recommendation</th>
<th>Yes</th>
<th>No*</th>
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<tbody>
<tr>
<td>Dean of College</td>
<td></td>
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<tr>
<td>Date</td>
<td>12/19/13</td>
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*The dean shall forward his/her recommendation to the chair of the department, the chair of A2C2, and the Vice President for Academic Affairs.

<table>
<thead>
<tr>
<th>A2C2 Recommendation</th>
<th>Approved</th>
<th>Disapproved</th>
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<tbody>
<tr>
<td>Chair of A2C2</td>
<td></td>
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<td>Date</td>
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<tr>
<th>Graduate Council Recommendation (if applicable)</th>
<th>Approved</th>
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<tbody>
<tr>
<td>Chair of Graduate Council</td>
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<tr>
<td>Date</td>
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<tr>
<td>Director of Graduate Studies</td>
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<td>Date</td>
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<tr>
<th>Faculty Senate Recommendation</th>
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<tr>
<td>President of Faculty Senate</td>
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<td>Date</td>
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<tr>
<th>Academic Vice President Recommendation</th>
<th>Approved</th>
<th>Disapproved</th>
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<tr>
<td>Academic Vice President</td>
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<td>Date</td>
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<tr>
<th>Decision of President</th>
<th>Approved</th>
<th>Disapproved</th>
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<tr>
<td>President</td>
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<td>Date</td>
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Please forward to Registrar.

Registrar: Date entered

Please notify department chair via e-mail that curricular change has been recorded.

[Revised 4-14-10]
WINONA STATE UNIVERSITY
PROPOSAL FOR A REVISED COURSE

This form is to be used to submit proposed revisions to an existing undergraduate or graduate course which can not be changed with the Notification Form. Every item on this form must be completed prior to submission to A2C2. The department proposing this revision must include a Financial and Staffing Data Sheet and the New and Revised Course and Program Approval Form with department chairperson’s and Dean’s signatures. Refer to Regulation 3-4, Policy for Changing the Curriculum, for complete information on submitting proposals for curricular changes.

Department ___________ Biology_______________________________________ Date ______ 11/18/13

Please provide all of the current information for this course:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 320</td>
<td>Ornithology</td>
<td>4</td>
</tr>
</tbody>
</table>

This proposal is for a(n):  X  Undergraduate Course  ___ Graduate Course
Is this course for USP?  ___Yes**  ___No Is this course for GEP?  ___Yes**  ___No

List all Major Codes to which this proposal applies as a required course:  BIES
List all Major Codes to which this proposal applies as an elective course:  BIEC, BIES, BICM, BIAH, BLST
List all Minor Codes to which this proposal applies as a required course:  
List all Minor Codes to which this proposal applies as an elective course:  BIOL

Prerequisites ___________ BIOL 308, 310, 312, CHEM 212

Grading Method  ___X  Grade only  ___P/NC only  ___Grade and P/NC Option
Frequency of offering  Alternate years (spring)

Please indicate any proposed changes in this course information

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits*</th>
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<tbody>
<tr>
<td>BIOL 406</td>
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</table>

This proposal is for a(n):  ___ Undergraduate Course  ___ Graduate Course
Is this course for USP?  ___Yes**  ___No Is this course for GEP?  ___Yes**  ___No

List all Major Codes to which this proposal applies as a required course:
List all Major Codes to which this proposal applies as an elective course:
List all Minor Codes to which this proposal applies as a required course:
List all Minor Codes to which this proposal applies as an elective course:

Prerequisites ___________ BIOL 308, 310, 312, 313

Grading Method  ____ Grade only  ____ P/NC only  ____ Grade and P/NC Option
Frequency of offering

* If this course will change the number of credits for any major or minor, the form Proposal for a Revised Program must also be submitted and approved according to the instructions on that form.
**For General Education Program (GEP) or University Studies (USP) course approval, the form Proposal for General Education Courses or Proposal for University Studies Courses must also be completed and submitted according to the instructions on that form.**

Please provide all of the following information:
(Note: a syllabus or other documentation may not substitute for this)

A. **Changes in the Course Description.** This information will be submitted to MnSCU by the WSU Registrar’s office.
   1. Provide both the current and the revised catalog descriptions of this course, including credit hours, prerequisites, and grading method. Please place these in two columns, side-by-side, for easy comparison.

   **BIOL 320 - Ornithology**

   (4 S.H.)

   Structure, classification, behavior, distribution, and identification of birds. Lecture, laboratory, and fieldwork.

   Prerequisites: BIOL 308 - Cell Biology, BIOL 310 - Genetics, BIOL 312 - General Ecology, and CHEM 212 - Principles of Chemistry I or instructor’s permission. Offered alternate years.

   **BIOL 406 - Ornithology**

   (4 S.H.)

   Structure, classification, behavior, distribution, and identification of birds. Lecture, laboratory, and fieldwork.

   Lectures emphasize bird evolution, anatomy, physiology, and reproductive behaviors. Labs focus on local bird identification and taxonomy and methods and techniques of gathering and analyzing data. Lecture, fieldwork, and laboratory.

   Prerequisites: BIOL 308 - Cell Biology, BIOL 310 - Genetics, BIOL 312 - General Ecology, and BIOL 313 - General Ecology Laboratory. Offered alternate years.

   2. Provide both the current and the revised course outline of the major topics and subtopics to be covered in the course. These outlines should be, at a minimum, two-level outlines of topics and subtopics. Place these in two columns, side-by-side, for easy comparison.

   **BIOL 320 course outline:**

   Bird Structure & Function
   Taxonomy in North America
   - Orders & Families
   - Characteristics
   - Food Habits
   - Distribution
   - Residence Status

   Bird Behavior
   - Song
   - Flocking

   Reproduction & Growth
   - Nests & Eggs
   - Rearing & Growth

   Birds & Human Disease

   Population Dynamics

   **BIOL 406 course outline:**

   Evolution and Anatomy
   - Introduction
   - Origin, Evolution, & Taxonomy

   Physiology & Courtship
   - Physiological processes
   - Song Production and Use
   - Territories
   - Courtship Behavior

   Reproduction, Ecology, & Behavior
   - Nest Construction
   - Reproduction
   - Egg Laying & Young
   - Ecology
   - Behavior

   Flight & More
   - Bird Zoogeography
   - Flight & Migration
   - Bird/Human Interactions
3.a Instructional delivery methods utilized: (Please check all that apply).

<table>
<thead>
<tr>
<th>Auditorium/Classroom</th>
<th>ITV</th>
<th>Online</th>
<th>Web Enhanced</th>
<th>Web Supplemented</th>
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</thead>
<tbody>
<tr>
<td>Laboratory</td>
<td></td>
<td>Service Learning</td>
<td>Travel Study</td>
<td>Internship/Practicum</td>
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<tr>
<td>Other: (Please indicate)</td>
<td>X</td>
<td></td>
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<td>Field trips</td>
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3.b. MnSCU Course media codes: (Please check all that apply).

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<tbody>
<tr>
<td>2. CD Rom</td>
<td>5. Broadcast TV</td>
<td>8. ITV Receiving</td>
<td></td>
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</tbody>
</table>

4. Describe both the current and the revised course requirements (papers, lab work, projects, etc.) and means of evaluation. Place these in two columns, side-by-side, for easy comparison.

BIOL 320 requirements:

3 unit exams – in-class essays  
Lab exam – taxonomy, study skins  
Field identification exam – sight & song

BIOL 406 requirements:

4 unit exams – in-class essays  
8 lab reports – data analysis, narrative  
2 lab exams – 1 taxonomy & study skins, 1 field identification (sight, song)  
1 research paper (independent research project)

5. Describe both the current and the revised course materials (textbook(s), articles, etc.) to be used in this course. Place these in two columns, side-by-side, for easy comparison.

BIOL 320 texts:

The Life of Birds (Welty & Baptista)  
Field Guide to Birds of Eastern North America (Peterson)

BIOL 406 texts:

The Life of Birds (Welty & Baptista)  
Ornithology (Gill)  
Birds of North America (Kaufman)  
iBird (app for iPad)  
Field & Laboratory Methods for General Ecology (Brower et al.)

6. List both the current and the revised student learning outcomes for this course and how each outcome will be assessed. Place these in two columns, side-by-side, for easy comparison.

BIOL 320 student learning outcomes:

1) Students will acquire knowledge of bird origins, evolution, anatomy, physiology, and behavior.  
   a. Lecture exams
2) Students will become familiar with bird taxonomy.  
   a. Lecture exams  
   b. Lab exam
3) Students will learn to identify local birds by sight and sound and recognize their preferred habitats.  
   a. Lab exams

BIOL 406 student learning outcomes:

1) Students will acquire knowledge of bird origins, evolution, anatomy, physiology, and behavior.  
   a. Lecture exams  
   b. Lab exercises  
   c. Research paper
2) Students will become familiar with bird taxonomy.  
   a. Lecture exams  
   b. Lab exam
3) Students will learn to identify local birds by sight and sound and recognize their preferred habitats.  
   a. Lab exams  
   b. Lab exercises
B. Rationale
Provide a rationale for each of the changes proposed.

We propose to change the course number from BIOL 320 to BIOL 406. This new, proposed course number more accurately conforms to the level at which this course will be taught and the expectations for students taking this course. With four course prerequisites all at the 300-level (BIOL 308, 310, 312, 313), this course is restricted to only upper-level Biology majors/minors. Increased expectations for student data collection, analysis, and writing resulting from fieldwork justify the change in course number to 400-level to match other, existing BIOL courses with similar rigor and expectations. The change in course prerequisites (remove CHEM 212, add BIOL 313) removes an unnecessary listing (CHEM 212) and adds one course already required for all BIES and BIEC majors.

C. Impact of These Changes on Other Departments, Programs, Majors, and Minors
1. Clearly state the impact of this revision on courses taught in other departments. Does this course duplicate the content of any other course? Is there an effect on prerequisites for this or any other courses?
No impact, no duplication, no effect on prerequisites.

2. Would approval of this course revision change the total number of credits required by any major or minor of any department? If so, explain the effects which this course revision would have.
No.

3. If this revision has an impact on the major or minor of any other department or program, it is the responsibility of the department submitting the proposal to send written notification to the department(s) or program(s) affected. State clearly which other programs are affected by this proposal and whether the other departments have been notified and/or consulted. Attach letter(s) of understanding from impacted department(s).
No impact on major/minor of other departments/programs.

D. Attach to This Proposal a Completed
1. Financial and Staffing Data Sheet
2. New and Revised Course and Program Approval Form

E. Department Contact Person for this Proposal:

Neal D. Mundahl
Name (please print)

507-457-5695
Phone

nmundahl@winona.edu
e-mail address

F. Review by Department A2C2 Representative

I have reviewed this proposal and certify that it is complete

Signature of A2C2 representative

Definitions for codes in 3a and 3b:
01–Satellite:
02– CD Rom:
03– Internet: Predominately = where all, or nearly all, course activity occurs in an online environment. One to two activities may occur face-to-face in a classroom, with the maximum being two activities.
04 – ITV Sending: a course in which students are in the classroom with the instructor, other students join via interactive television technology from other geographically separate locations
05 – Broadcast TV:
06 – Independent Study: a course in which the teacher develops specialized curriculum for the student(s) based on department guidelines in the University course catalog
07 – Taped: a course in which the teacher records the lessons for playback at a later date
08 – ITV Receiving: a course in which students are not in the classroom with the teacher, other students join via interactive television technology from other geographically separate locations
09 – Web Enhanced- Limited Seat Time: For a course in which students are geographically separate from the teacher and other students for a majority of required activities. However, some on-site attendance is required. The course includes synchronous and/or asynchronous instruction.
WINONA STATE UNIVERSITY
FINANCIAL AND STAFFING DATA SHEET

Course or Program: BIOL 406 Ornithology

Include a Financial and Staffing Data Sheet with any proposal for a new course, new program, or revised program.

Please answer the following questions completely. Provide supporting data.

1. Would this course or program be taught with existing staff or with new or additional staff? If this course would be taught by adjunct faculty, include a rationale.

This class will be taught with existing staff. No new, additional, or adjunct staff will be needed to teach this course.

2. What impact would approval of this course/program have on current course offerings? Please discuss number of sections of current offerings, dropping of courses, etc.

Approval of this course change will have no effect on current course offerings. The class currently is taught on an alternate-year basis (one section only), during spring semesters of odd-numbered years. That same schedule will be followed if this change is approved.

3. What effect would approval of this course/program have on the department supplies? Include data to support expenditures for staffing, equipment, supplies, instructional resources, etc.

Approval of this course change will result in no change in support expenditures for this class. We predict no change will be needed in staffing, equipment, supplies, or instructional resources compared to what is currently being used by the course during its present alternate-year offering.