NORTH CAROLINA STATE UNIVERSITY
GRADUATE COURSE ACTION FORM

NOTE: Click once on shaded fields to type data. To check boxes, right click at box, click "Properties", and click "Checked" under Default Values.

DEPARTMENT/PROGRAM: Department of Clinical Sciences

COURSE PREFIX/NUMBER: VMC 996

PREVIOUS PREFIX/NUMBER: none

COURSE TITLE: Advanced Avian Clinical Medicine

ABBREVIATED TITLE: ADV AVIAN CLIN MED

SCHEDULING: Fall ☒ Spring ☐ Summer ☐

Every Year ☒ Alt. Year Odd ☐ Alt. Year Even ☐ Other ☐

COURSE OFFERED: BY DISTANCE EDUCATION ONLY ☐ ON CAMPUS ONLY ☒ BOTH ON CAMPUS AND BY DISTANCE EDUCATION ☐

CREDIT HOURS: 2

GRADING: ABCDF ☐ S/U ☒

CONTACT HOURS: Lecture/Seminar 10 Laboratory/Studio 60 Research/Independent Study 10

REPEAT FOR CREDIT: Yes ☐ No ☒

INSTRUCTOR NAME: KEVEN FLAMMER, DVM

TITLE: Professor

GRADUATE FACULTY STATUS: Associate ☒ Full ☐

TYPE OF PROPOSAL
New Course ☒ Drop Course ☐
Course Revision ☐ Dual-Level Course ☐

REVISION
Content ☐ Prefix/Number ☐ Title ☐
Abbreviated Title ☐ Credit Hours ☐
Contact Hours ☐ Grading Method ☐
Pre-Corequisites ☐ Restrictive Statement ☐
Description ☐ Scheduling ☐

ANTICIPATED ENROLLMENT: Per semester 6 Multiple sections Yes ☐ No ☒ Max. per Section 6

PREREQUISITE(s): VMC 991 A Basic Avian Medicine Selective

COREQUISITE(s): None

PRE/Corequisite FOR: None

RESTRICTIVE STATEMENT: For 4th year students enrolled in the DVM curriculum. Qualifies for partial fulfillment of the clinical rotation requirement for either the Small and Exotic Animal or Zoo Focus Area.

REQUIRED CURRICULA/MINOR: DVM Curriculum

PROPOSED EFFECTIVE DATE: Fall 2010

APPROVED EFFECTIVE DATE: 

CATALOG DESCRIPTION IN CONCISE FORM MEANINGFUL TO STUDENT (INCLUDING RESTRICTIVE STATEMENT; LIMIT TO TOTAL OF 80 WORDS):

Students will work with teaching birds to develop skills in avian handling, diagnostic sample collection, anesthesia and radiology. Cadavers will be used to teach orthopedic and soft tissue surgical procedures. Students and faculty will spend approximately 5 days in the field, working with psittacine birds, waterfowl and raptors at Sylvan Heights Waterfowl Park in Scotland Neck, N. C. and at the Carolina Raptor Center in Charlotte, N. C. Restrict to senior DVM students. Prerequisite VMC 991A.

VERIFICATION/REQUEST BY: The course syllabus has been developed and is in conformance with the requirements of the Provost's website.

Instructor or Preparer: Date:

Department Head/Director of Graduate Programs: Date:

ENDORSED BY:

Chair, College Graduate Studies Committee: Date:

College Dean(s): Date:

APPROVED:

Dean of the Graduate School: Date:
INSTRUCTIONS

Provide the following information. If additional table rows are needed place cursor at location, select Table, Insert, Rows Above or Rows Below. Please limit your submission to 4 pages using 10-point font.

I. Course Justification (Explain the need for the course and its place in the curriculum in terms of the educational needs and interests of the students for whom the course is intended):

This elective senior year clinical rotation allows students to obtain experience with avian medicine in several different settings while under direct supervision by CVM faculty. The learning objectives will help prepare the student for entry level practice. This is an important addition to our curriculum since there are few other clinical experiences in clinical avian medicine at our institution. It will fulfill one of the elective clinical rotation requirements in the Small and Exotic Animal and Zoo Medicine Focus Areas.

II. Proposed Revisions with Justification (Briefly list the changes and the justification for each):

<table>
<thead>
<tr>
<th>Revision</th>
<th>Justification</th>
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III. Enrollment for Last Five Years (Enter data – look up at R&R website for either existing course number or special topics number as applicable. If not offered, indicate n/a. If previously offered as special topic, indicate designation after number enrolled [e.g. 17 - XX 592B]):

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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IV. Consultation with Other Departments (List all departments and individuals contacted, and any statements of objection, non-objection, or support. Inclusion of the entire document/communication is not necessary. Consultation is needed whenever there is a possibility of content duplication or when establishment or dropping would affect other programs.

<table>
<thead>
<tr>
<th>Department</th>
<th>Contact Name</th>
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V. Student Learning Outcomes. By the end of the course, the students will be able to:

- Identify common psittacine, waterfowl and eastern raptor species.
- Demonstrate skilled capture, restraint, and physical examination methods for different avian species.
- Formulate a problem list, differential list, and a diagnostic and treatment plan for individual patients (including treatment for options for common orthopedic and soft tissue injuries).
- Demonstrate skill in collection of diagnostic samples (including venipuncture, radiographs) and interpretation of samples (including CBCs, radiographs, and fecals).
- Demonstrate skill in performing treatment procedures (including IM injections, tube feeding and subcutaneous fluid therapy).
- Demonstrate skill in applying bandages and splints in birds (including Figure-of-eight bandages, wing-body wrap bandages, and various toe and foot bandages).
- Demonstrate how to repair avian long bone fractures.
- Demonstrate skill in both taking and interpreting avian radiographs.
- Demonstrate safe avian anesthesia and monitoring.
- Discuss management and prevention of captive management problems in wild birds, including bumblefoot (raptors), feather damage, and nutritional problems.
- Discuss rehabilitation issues, including evaluation for release and the issues related to conditioning a raptor for release to the wild.
VI. Student Evaluation Methods (List types of evaluation [tests, exam, papers, homework, etc.] and % weighting normally anticipated):

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Weighting for Graduate Course (%)</th>
<th>Weighting for Undergraduate Version – if Dual Level (%)</th>
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<tr>
<td>Observation by participating faculty</td>
<td>100%</td>
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VII. Explanation of Differences for Dual-Level Course (Explain differences in content, expectations, and outcomes for graduate level version of dual-level course and indicate evaluation above):

VIII. Resource Statement (New courses only. Indicate the resource requirements of this course and the source(s) of those resources.)

Space for lecture, discussion and laboratories.
Funds for laboratory teaching supplies, resident bird per diems, and van rental.
Funds for student and instructor motel bills while staying in the field.
Funds for teaching technical support.

Funds will be requested from the CVM senior rotation course budget. Space is available within the CVM.

IX. Topical Outline of Course and Time Devoted to Each Topic (Definition should be adequate to allow understanding of the course content. Indicate time measure used, e.g. weeks, 50 min. lectures, 75 min. lectures, etc.):

2 week clinical rotation. Time will be divided into lecture/discussion periods; laboratory sessions with live birds and cadavers, and approximately 5 days in the field working at avian facilities.

Sample Schedule – Daily Activities

Day 1: Introduction: Assign student projects + Diagnostic Sample Collection and Interpretation Module
Day 2: Field service at Sylvan Heights Center – psittacine/waterfowl exams
Day 3: Field service at Sylvan Heights Center – psittacine/waterfowl exams
Day 4: Process samples from Sylvan Heights
Day 5: Anesthesia and radiology module
Day 6: Orthopedic surgery module
Day 7: Field service at Carolina Raptor Center
Day 8: Field service at Carolina Raptor Center
Day 9: Field Service at Carolina Raptor Center + return to Raleigh
Day 10: Interactive case presentations