

# VMC 924: Equatorial Zoology and Medicine In Galápagos

---

## In Workflow

1. 19VMC Grad Head (lizette\_hardie@ncsu.edu)
2. CVM CC Coordinator GR (kenuss@ncsu.edu; kasulli6@ncsu.edu)
3. CVM CC Chair GR (ajbirken@ncsu.edu; sam\_jones@ncsu.edu)
4. CVM Dean GR (kmmeurs@ncsu.edu; keven\_flammer@ncsu.edu)
5. ABGS Coordinator (george\_hodge@ncsu.edu; lian\_lynch@ncsu.edu; mlnosbis@ncsu.edu)
6. ABGS Meeting (george\_hodge@ncsu.edu; lian\_lynch@ncsu.edu; mlnosbis@ncsu.edu)
7. ABGS Chair (george\_hodge@ncsu.edu; lian\_lynch@ncsu.edu; mlnosbis@ncsu.edu)
8. Grad Final Review (george\_hodge@ncsu.edu; lian\_lynch@ncsu.edu; mlnosbis@ncsu.edu)
9. PeopleSoft (ldmihalo@ncsu.edu; blpearso@ncsu.edu; Charles\_Clift@ncsu.edu; jmharr19@ncsu.edu; Tracey\_Ennis@ncsu.edu)

## Approval Path

1. Mon, 30 Nov 2015 13:54:25 GMT  
Elizabeth Hardie (lizette\_hardie): Approved for 19VMC Grad Head
2. Mon, 11 Jan 2016 17:31:30 GMT  
Kirk Nuss (kenuss): Approved for CVM CC Coordinator GR
3. Mon, 11 Jan 2016 17:46:48 GMT  
Adam Birkenheuer (ajbirken): Approved for CVM CC Chair GR
4. Tue, 19 Jan 2016 17:48:47 GMT  
Keven Flammer (keven\_flammer): Approved for CVM Dean GR
5. Wed, 20 Jan 2016 15:43:16 GMT  
George Hodge (george\_hodge): Approved for ABGS Coordinator
6. Mon, 08 Feb 2016 16:53:13 GMT  
George Hodge (george\_hodge): Approved for ABGS Meeting

## New Course Proposal

Date Submitted: Thu, 22 Oct 2015 23:55:46 GMT

## Viewing: VMC 924 : Equatorial Zoology and Medicine In Galápagos

Changes proposed by: galewbar

### Course Prefix

VMC (Veterinary Medicine - CASS)

### Course Number

924

### Cross-listed Course

No

### Title

Equatorial Zoology and Medicine In Galápagos

### Abbreviated Title

Galápagos Veterinary Medicine

### College

College of Veterinary Medicine

**Academic Org Code**

Teaching - CASS Department (19VMC)

**CIP Discipline Specialty Number**

51.2401

**CIP Discipline Specialty Title**

Veterinary Medicine.

**Term Offering**

Spring Only

**Year Offering**

Offered Alternate Even Years

**Effective Date**

Spring 2016

**Previously taught as Special Topics?**

No

**Course Delivery**

Remote Location/Site Based

**Remote Location/Site**

Galápagos Science Center, San Cristóbal Island, Galápagos, Ecuador

**Grading Method**

Credit Only (S/U)

**Credit Hours**

1

**Course Length**

1

**weeks**

**Contact Hours**

**(Per Week)**

**Component Type**

Lecture

Field Work

**Contact Hours**

9

26

**Course Is Repeatable for Credit**

No

**Instructor Name**

Gregory A. Lewbart

**Instructor Title**

Professor of Aquatic Animal Medicine

**Grad Faculty Status**

Full

**DELTA/Online Enrollment:**

Open when course\_delivery = distance OR course\_delivery = online OR course\_delivery = remote

Delivery Format	Per Semester	Per Section	Multiple Sections?	Comments
FWK	0	0	No	N/A

**Course Prerequisites, Corequisites, and Restrictive Statement**

Limited to DVM program students.

**Is the course required or an elective for a Curriculum?**

No

**Catalog Description**

This unique opportunity will allow DVM students to experience a unique, equatorial archipelago and much of its natural history offerings. The Galápagos Science Center (GSC) will serve as the base of operations. Dr. Gregory Lewbart, who has worked at the facility four separate times, will be the local program leader and guide. He will be assisted by local and visiting scientists. Lectures, laboratory sessions, and field trips will cover a wide variety of zoological and medical topics dealing with native invertebrates, fishes, reptiles, birds, and mammals. There will be an emphasis on aquatic species and a paper is required.

**Justification for new course:**

There is nothing like this in the current DVM curriculum. For the past 2-plus years Dr. Lewbart has been developing relationships in Galápagos and these collaborations will allow for a unique and rich learning experience for our students.

**Does this course have a fee?**

No

**Consultation**

College(s)	Contact Name	Statement Summary
College of Veterinary Medicine	Kirk Nuss	Course appears unique in the curriculum campus-wide so outside consults seem unnecessary. There have been trips to Galapagos previously but none with However, Study Abroad was consulted by faculty to determine best way to incorporate class into Study Abroad processes.

**Instructional Resources Statement**

Since this is being offered during the CVM's spring break no additional resources will be required nor will it affect any Raleigh-based teaching, research, or service commitments.

**Course Objectives/Goals**

1. Learn the basics of invertebrate anatomy, physiology, and medicine as it applies to key Galápagos species.
2. Learn the basics of fish anatomy, physiology, and medicine as it applies to key Galápagos species.
3. Learn the basics of reptile anatomy, physiology, and medicine as it applies to key Galápagos species.
4. Learn the basics of pinniped anatomy, physiology, and medicine as it applies to key Galápagos species.
5. Understand the importance, and the challenges, of protecting endemic, vulnerable species on an equatorial archipelago.

**Student Learning Outcomes**

- 1.
2. Understand safe capture, restraint, physical examinations, and how to obtain diagnostic samples from multiple species including sea turtles, marine iguanas, sea lions, fishes, and marine invertebrates.
3. Describe the main anatomical and physiological attributes of the species listed above.
4. Understand the main health challenges, both natural and anthropogenic, to the species listed above.
5. Explain the logistics involved with permits and protocols necessary to sample endangered species in a foreign country.
6. Describe the benefits and drawbacks of living and working on small, sparsely inhabited islands, where tourism is a key economic driver.

**Student Evaluation Methods**

<b>Evaluation Method</b>	<b>Weighting/Points for Each</b>	<b>Details</b>
Attendance	50	Students will be expected to attend all lectures and field trips.
Short Paper	25	Students will be expected to write a three to five page paper on a pertinent topic of their choosing.
Participation	25	Students will be expected to engage with faculty, other students, and the local residents.

**Topical Outline/Course Schedule**

<b>Topic</b>	<b>Time Devoted to Each Topic</b>	<b>Activity</b>
Invertebrates	2 Hours	Lecture and field time
Fishes	5 Hours	Lecture and field time
Reptiles	10 Hours	Lecture and field time
Marine mammals	5 Hours	Lecture and field time
General natural history	13 Hours	Field time

**Syllabus**

VMC-924 Syllabus, Current.docx

**Additional Documentation**

**Additional Comments**

mInosbis 1/19/2016: No overlapping courses, no consultation required.

ghodge 1/20/2016 Ready for ABGS reviewers. Department needs to verify all study abroad policies are followed.

ABGS Reviewer Comments:

-the course looks great

-only suggestion is to describe in the syllabus how the participation component of the course will be structured

ghodge 2/6/2016 Send to ABGS

**Course Reviewer Comments**

Key: 8270