

15 GNC 2nd Revised 4/11/2015

FORMAT 1

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).  
See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing curriculum & course changes.

### TRIAL COURSE OR NEW COURSE PROPOSAL

**SUBMITTED BY:**

Department	Veterinary Medicine	College/School	CNSM
Prepared by	Cathy Griseto	Phone	474-1928
Email Contact	<a href="mailto:cagriseto@alaska.edu">cagriseto@alaska.edu</a>	Faculty Contact	Michael Harris & Arleigh Reynolds Assoc Dean Vet

**1. ACTION DESIRED**

(CHECK ONE):

Trial Course

New Course

☒**2. COURSE IDENTIFICATION:**

Dept

DVM

Course #

618

No. of Credits

7

Justify upper/lower division status &amp; number of credits:

Professional Program required course – see CSU syllabus attached

**3. PROPOSED COURSE TITLE:**

Veterinary Physiology and Histology

**4. To be CROSS LISTED?**  
YES/NO

NO

If yes, Dept:

Course #

NOTE: Cross-listing requires approval of both departments and deans involved. Add lines at end of form for additional required signatures.

**5. To be STACKED?**

YES/NO

NO

If yes, Dept:

Course #

How will the two course levels differ from each other? How will each be taught at the appropriate level?:

Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi—undergraduate and graduate versions—will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online – see URL at top of this page.

**6. FREQUENCY OF OFFERING:**

Fall each year

Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants

**7. SEMESTER & YEAR OF FIRST OFFERING**

(AY2013-14 if approved by 3/1/2013; otherwise AY2014-15)

AY2015-2016

**8. COURSE FORMAT:**

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, **any core course compressed to less than six weeks must be approved by the Core Review Committee.**

COURSE FORMAT:  
(check all that apply)

1

2

3

4

5

☒

6 weeks to full semester

OTHER FORMAT (specify)

Mode of delivery (specify lecture, field trips, labs, etc)

Lectures and Labs

**9. CONTACT HOURS PER WEEK:**

6

LECTURE  
hours/weeks

3

LAB  
hours /week

0

PRACTICUM  
hours /week

Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/guidelines-for-computing-/> for more information on number of credits.

OTHER HOURS (specify type)

10. **COMPLETE CATALOG DESCRIPTION** including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

Example of a **complete** description:

FISH F487 W, O Fisheries Management

3 Credits Offered Spring

Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. *Prerequisites:* COMM F131X or COMM F141X; ENGL F111X; ENGL F211X or ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)

**DVM 616 Department of Veterinary Medicine**

**6+3 Credits Offered Fall**

**Veterinary Physiology and Histology**

The course will discuss the histology and physiology of domestic animal organ systems, tissues, cartilage, bone, muscle, arthrology, nervous system, hematopoiesis, lymphatic, cardiovascular, respiratory and digestive systems; the renal system and physiology. The course will help to place the knowledge in histology and physiology in a clinical context.

**Prerequisites: Acceptance into Professional Veterinary Program**

11. **COURSE CLASSIFICATIONS:** Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

H = Humanities

S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form.

YES:

NO:

x

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6

W = Writing Intensive, Format 7

X = Baccalaureate Core

11.A Is course content related to northern, arctic or circumpolar studies? If yes, a "snowflake" symbol will be added in the printed Catalog, and flagged in Banner.

YES

NO

x

12. **COURSE REPEATABILITY:**

Is this course repeatable for credit?

YES

NO

X

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit?

TIMES

If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

13. **GRADING SYSTEM:** Specify only one. Note: Changing the grading system for a course later on constitutes a Major Course Change – Format 2 form.

LETTER:

X

PASS/FAIL:

**RESTRICTIONS ON ENROLLMENT (if any)**

14. **PREREQUISITES**

Acceptance into Professional Veterinary Medical Program or permission of Instructor

These will be required before the student is allowed to enroll in the c

15. **SPECIAL RESTRICTIONS, CONDITIONS**

Acceptance into Professional Veterinary Medical Program or permission of Instructor

16. **PROPOSED COURSE FEES**

TBD

Has a memo been submitted through your dean to the Provost for fee approval?

Yes

Yes/No

**17. PREVIOUS HISTORY**

Has the course been offered as special topics or trial course previously?

Yes/No

No

If yes, give semester, year, course #, etc.:

**18. ESTIMATED IMPACT**

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

Professional Program approved by BOR, Chancellor and Provost – Impact on Animal Resource Center facility in year 1 due to renovation in process

**19. LIBRARY COLLECTIONS**

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No

x

Yes

Department will keep complete library of required materials in AHRB office. UAF library will provide additional resources with current holdings (according to current catalogue).

**20. IMPACTS ON PROGRAMS/DEPTS**

What programs/departments will be affected by this proposed action?

Include information on the Programs/Departments contacted (e.g., email, memo)

Impact on Animal Resource Center facility in year 1 due to renovation in process. ARC contacted and approved (jeblake@alaska.edu)

**21. POSITIVE AND NEGATIVE IMPACTS**

Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.

Biology & Wildlife, Chemistry or SNRE students may request admission to class for research or professional development. Vet Med will be providing curriculum in biomedical sciences which was not available previously.

**JUSTIFICATION FOR ACTION REQUESTED**

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

The course is required for first year veterinary students. The course has been approved by their accreditation requirements and will be offered at UAF as part of the 2+2 program (first two years at UAF and last two years at CSU).

**APPROVALS: Add additional signature lines as needed.**

Signature, Chair, Program/Department of: Veterinary Medicine Date

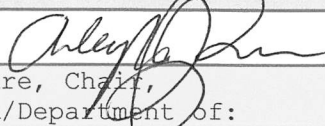
Signature, Chair, College/School Curriculum Council for: CNSM Date

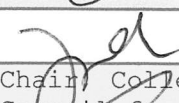
Signature, Dean, College/School of: CNSM Date

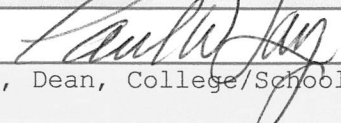
Offerings above the level of approved programs must be approved in advance by the Provost.

Signature of Provost (if above level of approved programs) Date

APPROVALS: Add additional signature lines as needed.

	Date	7/7/14
Signature, Chair, Program/Department of:	Veterinary Medicine	

	Date	10-7-14
Signature, Chair, College/School Curriculum Council for:	CNSM	

	Date	10/7/14
Signature, Dean, College/School of:	CNSM	

Offerings above the level of approved programs must be approved in advance by the Provost.

	Date	
Signature of Provost (if above level of approved programs)		

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

	Date	
Signature, Chair Faculty Senate Review Committee:   __Curriculum Review   __GAAC __Core Review        __SADAC		

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

	Date	
Signature, Chair, Program/Department of:		
	Date	
Signature, Chair, College/School Curriculum Council for:		
	Date	
Signature, Dean, College/School of:		



**ATTACH COMPLETE SYLLABUS (as part of this application).** This list is online at:  
<http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/uaf-syllabus-requirements/>

The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied.

**SYLLABUS CHECKLIST FOR ALL UAF COURSES**

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

**1. Course information:**

☐ Title, ☐ number, ☐ credits, ☐ prerequisites, ☐ location, ☐ meeting time (make sure that contact hours are in line with credits).

**2. Instructor (and if applicable, Teaching Assistant) information:**

☐ Name, ☐ office location, ☐ office hours, ☐ telephone, ☐ email address.

**3. Course readings/materials:**

☐ Course textbook title, ☐ author, ☐ edition/publisher.  
☐ Supplementary readings (indicate whether ☐ required or ☐ recommended) and  
☐ any supplies required.

**4. Course description:**

☐ Content of the course and how it fits into the broader curriculum;  
☐ Expected proficiencies required to undertake the course, if applicable.  
☐ Inclusion of catalog description is *strongly* recommended, and  
☐ Description in syllabus must be consistent with catalog course description.

**5. ☐ Course Goals (general), and (see #6)**

**6. ☐ Student Learning Outcomes (more specific)**

**. Instructional methods:**

☐ Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

**8. Course calendar:**

☐ A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

**9. Course policies:**

☐ Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

**10. Evaluation:**

☐ Specify how students will be evaluated, ☐ what factors will be included, ☐ their relative value, and ☐ how they will be tabulated into grades (on a curve, absolute scores, etc.) ☐ Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but is a convenient way to publicize this.) Link to PDF summary of grading policy for "C":

[http://www.uaf.edu/files/uafgov/Info-to-Publicize-C\\_Grading-Policy-UPDATED-May-2013.pdf](http://www.uaf.edu/files/uafgov/Info-to-Publicize-C_Grading-Policy-UPDATED-May-2013.pdf)

**11. Support Services:**

☐ Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

**12. Disabilities Services:** Note that the phone# and location have been **updated**.

<http://www.uaf.edu/disability/> The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials.

☐ State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

**DVM 618**  
**Veterinary Physiology and Histology**  
**SYLLABUS – FALL**

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**Department of Veterinary Medicine, University of Alaska Fairbanks**

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1. Course Information:

Title: Veterinary Physiology and Histology  
Number: DVM 618  
Credit: 7 credits (6+3) lecture + laboratory  
Prerequisites: Successful Application to Professional Veterinary Program  
Location: TBD  
Meeting time: Three Lectures per week (2 hours each) and one 3 hour lab per week.  
Each week includes lectures and labs which correspond with the lectures.

2. Contact Information:

Course coordinator /  
Instructor: Dr. Michael Harris, Course Coordinator  
Office Location: 123 Margaret Murie Life Sciences Building  
Office Hours: By appointment  
Office Phone: TBD  
Email: [mbharris@alaska.edu](mailto:mbharris@alaska.edu)

Co-Instructor: Lorrie Rea  
[lrea@alaska.edu](mailto:lrea@alaska.edu)

Co-Instructor: Christine Thomson (email TBD)

Email is the best way to reach the instructors. You should receive a response to your email within 24 hours when it is received. If you do not receive a reply within this time frame, assume that the email was not received and please resend your message.

3. Course Reading/Materials:

None required. Recommended readings, including journal articles, will be distributed prior to class sessions via on-line resources or during class periods.

4. Course Description:

The course will discuss the histology and physiology of domestic animal organ systems, tissues, cartilage, bone, muscle, arthrology, nervous system, hematopoiesis, lymphatic, cardiovascular, respiratory and digestive systems; the renal system and physiology. The course will help to place the knowledge in histology and physiology in a clinical context.

#### 5. Course Goals:

Through a team of instructors this course will present the principles veterinary histology and physiology of organ systems in domestic animals that will help students build an understanding of the scientific principles underlying veterinary medicine. Specifically this course will link histological and physiological features of domestic animals to possible pathologies and treatments likely to be encountered in veterinary practice. This material will be presented in a problem-based learning approach to encourage critical thinking to prepare students for future clinical reasoning and veterinary practice. This course will help students understand how to address information gaps through effective self-directed use of sources of information.

#### 6. Student Learning Outcomes:

At the end of this course the students will be able to describe the histology of major organ systems in domestic animals and how these histological features of tissues relate to function and disease. Students will be able to apply analytical thought to this body of knowledge in microscopic form and function. Students will learn to work effectively with others and to express ideas clearly both in writing and oral communication, including using media as appropriate. The successful student will also apply scientific and quantitative reasoning to define, analyze and solve clinical problems and improve information literacy through access, evaluation and use of relevant reference sources.

#### 7. Instructional Methods:

The course is designed based on the scientific teaching method. This method includes active learning and group activities as well as formative assessments. The students are expected to read assigned material ahead of class so that class time can be spent on discussion of assigned reading, problem solving as well as other active learning activities centered around health and disease in domestic animals. Assessment will be used throughout the course to help students judge their learning progress and help identify areas in need of focused attention.

This course will use Blackboard (classes.uaf.edu) to make additional information available. All information associated with this course will be posted there, including lecture notes, slides, handouts, or study guides etc. Lecture slides will be posted before each lecture. Students are expected to download, print and preview the material before each lecture. Students can also check your grades and make sure that information related to your record is accurate.

#### 8. Course Calendar:

For details, refer to the section "Tentative Lecture Schedule" at the end of this syllabus.

#### 9. Course Policies:

- Attendance:  
Students are expected to attend all classes. Exams will draw on lecture material and students that do not attend class will likely not do well in exams.
- Classroom Behavior:  
Any type of behavior in the classroom that is disruptive, distracting, or disrespectful to the instructor or to your fellow students will not be tolerated and will result in dismissal from the classroom. This includes, but is not limited to, disrespectful comments, and the use of tobacco products. All cell phones or other such devices must be silenced while in the classroom. Do not browse the Internet, text message or IM while in the classroom. You can use such devices for note taking or other class related activities.

Plagiarism:

Plagiarism is the overt or covert use of other people's work or ideas without acknowledgement of the source. This includes using ideas or data from a classmate or colleague without permission and acknowledgement, including sentences from journal articles in your writing without citing the author, or copying parts of a website into your essay. Plagiarism and cheating are serious offenses that violate the student code of conduct which may result in an "F" in the course and/or referral to the university disciplinary committee.

#### 10. Evaluation:

Weekly laboratory quizzes will be administered on-line via Blackboard. Blackboard quizzes serve to prepare for glass slide quizzes. The students will have to label indicated features in histology images. The quizzes will be due at the end of each week (Friday 5pm). There will also be 3 glass slide quizzes where students need to identify and describe features of tissues previously described in the lab sections. The laboratory final examination will require students to examine specimens on glass slides.

Written examinations on material discussed during lecture may include multiple-choice, short-answer, and/or essay questions and cover lecture material. Lecture exams DO NOT have visual histology images on them, but content from the lecture or lab could be on the lecture or lab exams.

- **No Make-Up Exams:**

All exams must be taken at the scheduled time. **NO EXCEPTIONS!** Exams cannot be taken before or after the scheduled date/time. If you miss an exam, you will receive a zero as your grade.

**\*Note:** If you have a conflict due to a university-sponsored event, you must notify me prior to the exam with a confirmation letter from University authority. If you miss an exam for medical reasons you need to inform the instructor as soon as possible and provide a statement from a licensed physician.

- **Grading Scale:** Each week includes lectures and labs which correspond with the lectures – grades are based on both lecture/exams and lab/exams.

- **Grade Distributions:**

Midterm Exams	100 points
Lab quizzes	50 Points
Glass Slide Quizzes	50 Points
Final Exam	100 points
<b>Total</b>	<b>300 points</b>

- Grades will be calculated on a percentage scale.

A+	96-100	%
A	92-95.9	%
A-	88-91.9	%
B+	84-87.9	%
B	80-83.9	%
B-	76-79.9	%



C+	72-75.9	%
C	68-71.9	%
C-	64-67.9	%
D	60-63.9	%
F	<60	%

#### 11. Support Services:

If you require more assistance than can be provided in class, and office hours, you may want to contact Student Support Services (<http://www.uaf.edu/sssp/>) or the Department of Veterinary Medicine for assistance.

#### 12. Disability Services:

All students, including those with disabilities, are welcome in this course, and we are committed to providing equal access to this course for all students. If you have a disability (including learning disabilities) please inform us during the first week of class so that we can accommodate your specific needs. If you have not already done so, you will also need to contact UAF's Office of Disabilities Services (474-5655). Everyone should have the opportunity to participate fully in the course and to complete assignments and exams to the best of their ability. If accommodations are needed to enable you to do so, we will gladly work with you to provide them.

## Tentative Lecture/Lab Schedule –

Each week includes lectures and labs, which cover the histology of the organ systems discussed in the lectures – grades are based on both lecture/exams and lab/exams.

### Week 1 9/3-9/4/15

Histology and microscopy  
Systems, organs and tissue concepts

### Week 2 9/08-9/11/15

Histology of Lining epithelium  
Histology of Glandular epithelium  
Histology of Integumentary system  
Histology of the hoof and claw  
Overview of connective tissue  
Histology of Cartilage  
Histology of bone  
Histology of bone, cont.

### Week 3 9/14-9/18/15

Physiology of bone  
Bone development and arthrology  
Physiology of Muscle tissue  
Physiology of Nervous tissue  
Physiology of Membrane potentials and excitable cells  
Cell biology of muscle

### Week 4 9/21-9/25/15

Cell biology of neurons  
Function of the Autonomic nervous system  
Physiology of Autonomic nervous system Receptors  
Physiology of Hematopoietic system

### Week 5 9/28-10/2/15

Physiology of Hematopoietic system  
Physiology of Lymphatic system

#### **EXAM 1:**

Physiology of Receptors and cell signaling

### Week 6 10/5-10/9/15

Physiology of Endocrine systems  
Glass Slide Quiz 1 (Review labs 1-5)

### Week 7 10/12-10/16/15

Physiology of Endocrine systems  
Physiology of Cardiovascular system

### Week 8 10/19-10/23/15

Physiology of Cardiovascular system

Week 9 10/26-10/30/15  
Physiology of the Respiratory system

Week 10 11/2-11/6/15  
Physiology of Respiratory system  
**EXAM 2:**

Week 11 11/9-11/13/15  
Physiology of the Digestive system  
Glass Slide Quiz 2 (Review labs 6-10)

Week 12 11/16-11/20/15  
Physiology of the Digestive system

Week 13 11/23-11/25/15 (No Lab (Thanksgiving))  
Fluids and electrolytes  
Renal physiology

Week 14 11/30-12/4/15 Renal System  
Renal physiology

Week 15 12/7-12/11  
Acid-base physiology  
Comparative osmoregulation and excretion  
Glass Slide Quiz 2 (Review labs 11-14)

**FINAL EXAM as scheduled by University.**