

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

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 & number of credits: **Professional Program required course – see CSU syllabus attached**

3. PROPOSED COURSE TITLE: **Organ Systems Anatomy & Physiology**

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**

**RECEIVED**

**AUG -5 2014**

Dean's Office  
College of Natural Science & Mathematics

Governance  
10/8/14  
TVF



## 9. CONTACT HOURS PER WEEK:

5

LECTURE  
hours/weeks

6

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

7 Credits Offered Fall

Organ Systems Anatomy &amp; Physiology

This course will provide solid knowledge in the Physiology of all of the major organ systems and hematology.

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 6W = Writing Intensive,  
Format 7X = 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

**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/No

Yes

**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

**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.

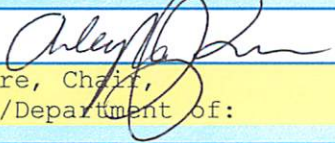
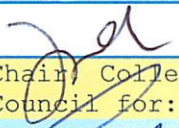
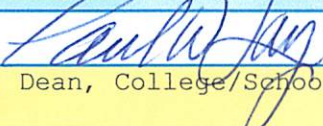
**JUSTIFICATION FOR ACTION REQUESTED**

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 and the syllabus is provided by CSU CVMBS. 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.

		Date	7/7/14
Signature, Chair, Program/Department of:		<u>Veterinary Medicine</u>	
		Date	10-7-14
Signature, Chair, College/School Curriculum Council for:		<u>CNSM</u>	
		Date	10/2/14
Signature, Dean, College/School of:		<u>CNSM</u>	

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)**

**7. 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 ORGAN SYSTEMS: ANATOMY, HISTOLOGY & PHYSIOLOGY SYLLABUS – FALL**

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

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**1. Course Information:**

Title: Organ Systems; Anatomy & Physiology  
Number: DVM 618  
Credit: 7  
Prerequisites: Successful Application to Professional Veterinary Program  
Location: TBD  
Meeting time: Five hours of lectures per week with two labs per week (three hours each). Exact times TBD. Each week includes lectures and labs which correspond with the lectures – grades are based on both lecture/exams and lab/exams.

**2. Contact Information:**

Name: 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)

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

Instructor: TBD - Physiologist

Email is the best way to reach the instructor. 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 include an introduction to veterinary 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 veterinary knowledge in the future clinical field.

#### 5. Course Goals:

Through a team of instructors this course will present an introduction to veterinary anatomy and physiology of organ systems in domestic animals and wildlife that will help students build an understanding of the scientific principles underlying veterinary medicine. This material will be presented in a problem-based learning approach to encourage critical thinking to prepare students for future clinical learning and veterinary practice. This course will help students understand the limitations of their knowledge in anatomy and physiology and how to address information gaps through effective self-directed use of sources of information.

#### 6. Student Learning Outcomes:

For students to gain a working knowledge of the anatomy and physiology of organ systems in domestic animals and wildlife species, with an understanding of the interconnectedness of systems, that will prepare them for further education in veterinary sciences. Through this course we expect students to develop disciplinary knowledge through demonstration of systematic and coherent knowledge in animal physiology and anatomy, apply analytical thought to this body of knowledge. 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 problems and improve information literacy through access, evaluation and use of relevant reference sources.

#### 6. 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. 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](http://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. Student version of lectures 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.

#### 7. Course Calendar:

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

#### 8. Course Policies:

- **Attendance:**  
Students are expected to attend all classes.
- **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, the use of tobacco products, consumption of food, use of cell phones or wireless devices, or use of any type of communicative device. All cell phones or other such devices must be turned off while in the classroom. Do not browse the Internet, text message or IM while in the classroom.
- **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.

#### 9. Evaluation:

Weekly laboratory quizzes will be administered on-line via Blackboard. Details on Blackboard will be given in class. There will also be 3 glass slide quizzes. The laboratory final examination will require students to examine specimens on glass slides. Histology is looking at images on/from glass slides. These images will be on your weekly quizzes, glass slide quizzes and the cumulative lab final. Written examinations may include multiple-choice, short-answer, and/or essay questions. 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.

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

Grades will be calculated on a 100-point scale.

A/A+	93 – 100%
A-	90 – 92.9%
B+	87 – 89.9%
B	83 – 86.9%
B-	80 – 82.9%
C+	77 – 79.9%
C	70 – 76.9%
D	65 – 69.9%
F	<65%

#### 10. 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.

#### 11. 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 (474-7043). 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 Schedule** - Each week includes lectures and labs which correspond with the lectures – grades are based on both lecture/exams and lab/exams.

**Week 1 9/3-9/9/15**

Histology and microscopy  
Systems, organs and tissue concepts  
Lining epithelium  
Glandular epithelium  
Integumentary system

**Week 2 9/10-9/16/15**

*General Tissues, Epithelia & Glandular*  
*Histology of the hoof and claw*  
Overview of connective tissue  
Cartilage  
Histology of bone

**Week 3 9/17-9/23/15**

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

**Week 4 9/24-9/30/15**

Cell biology of neurons  
Function of the ANS  
ANS Receptors  
Hematopoietic system  
Hematopoietic system

**Week 5 10/1-10/7/15**

Hematopoietic system  
Lymphatic system  
Lymphatic system  
**EXAM 1:**  
Receptors and cell signaling

**Week 6 10/8-10/14/15**

Endocrine system  
Endocrine system  
Endocrine system  
Endocrine system  
Anatomy of tubular viscera

Week 7 10/15-10/21/15

Cardiovascular system  
Cardiovascular system  
Cardiovascular system  
Cardiovascular system  
Cardiovascular system

Week 8 10/22-10/28/15

Cardiovascular system  
Cardiovascular system  
(VM616, Dev. of face)  
(VM616, Larynx)  
Cardiovascular system

Week 9 10/29-11/4/15

Respiratory system  
Respiratory system  
**EXAM 2:**  
Respiratory system

Week 10 11/5-11/11/15

Respiratory system  
Respiratory system  
Respiratory system  
Respiratory system  
Respiratory system

Week 11 11/12-11/18/15 Respiratory & Digestive Systems

Respiratory system  
Respiratory system  
Digestive system  
Digestive system  
Digestive system

Week 12 11/19-11/25/15

Digestive system  
Digestive system  
Digestive system  
Fluids and electrolytes  
**EXAM 3: RESPIRATORY AND DIGESTION**

Week 14 11/30-12/4/15

Renal physiology  
Renal physiology  
Renal physiology  
Renal physiology  
Renal physiology



12/7-12/11/15

Renal physiology  
Renal physiology  
Acid-base physiology  
Acid-base physiology  
Acid-base physiology  
Comparative osmoregulation and excretion

12/14-12/16/15 FINALS

Cumulative Lab – and Cumulative Lecture

### **Laboratory:**

Laboratory exercises are designed to familiarize the student with the principals and practices of light microscopy and tissue histology. Exercises will include hands-on use of microscopes, tissue and sample preparation, and identification of histological features of all major tissue types. Weekly laboratory exercises will follow the schedule;

Laboratory 1 Introduction to the Principles of Histology & Microscopy  
Laboratory 2 Surface Epithelia & Glandular Epithelium  
Laboratory 3 Connective Tissues (Cartilage, Adipose & Fibrous), Skin/Integument & Hoof  
Laboratory 4 Connective Tissue (Bone), Muscle Tissue & Arthrology  
Laboratory 5 Nervous Tissue Glass Slide Quiz 1 (Review labs 1-5)  
Laboratory 6 Hematopoiesis & Lymphatic System  
Laboratory 7 Endocrine System  
Laboratory 8 Cardiovascular System  
Laboratory 9 Respiratory System Glass Slide Quiz 2 (Review labs 6-9)  
Laboratory 10 Gastrointestinal System I – The Digestive Tube  
Laboratory 11 Gastrointestinal System II – Accessory Digestive Organs  
Laboratory 12 Urinary System Glass Slide Quiz 3 (Review labs 10-12)