

19-GNC Revised 4/15/2015

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	Molly Murphy and Arleigh Reynolds Assoc Dean Vet Med

**1. ACTION DESIRED**

(CHECK ONE):

Trial Course

New Course

☒
**2. COURSE IDENTIFICATION:**

Dept

DVM

Course #

640

No. of Credits

5

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

Professional Program required course – see CSU syllabus attached

**3. PROPOSED COURSE TITLE:**

Veterinary Pathology/Biology of Disease I

**4. To be CROSS LISTED?**

YES/NO

If yes, Dept:

BIOL

MSL

Course #

6XX

6XX

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:**

Spring 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

☒

X

6 weeks to full semester

OTHER FORMAT (specify)

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

Lecture and Lab

**9. CONTACT HOURS PER WEEK:**


LECTURE hours/weeks

LAB hours /week

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 640 Department of Veterinary Medicine**

**5 (4+3) Credit Offered Spring**

**Veterinary Pathology/Biology of Disease I**

The course will discuss basic principles of disease with special emphasis on processes likely to be encountered in veterinary practice. We will discuss these topics organized by underlying disease mechanism. The discussions will move from general cell mediated processes to more specific disease mechanisms.

**Pre-requisites: Successful completion of first Semester Veterinary Courses**

**DVM 6XX Marine Biology and Limnology**

**5 (4+3) Credit Offered Spring**

**Veterinary Pathology/Biology of Disease I**

The course will discuss basic principles of disease with special emphasis on processes likely to be encountered in veterinary practice. We will discuss these topics organized by underlying disease mechanism. The discussions will move from general cell mediated processes to more specific disease mechanisms.

**Pre-requisites: Permission of Instructor**

**DVM 6XX Biology and Wildlife**

**5 (4+3) Credit Offered Spring**

**Veterinary Pathology/Biology of Disease I**

The course will discuss basic principles of disease with special emphasis on processes likely to be encountered in veterinary practice. We will discuss these topics organized by underlying disease mechanism. The discussions will move from general cell mediated processes to more specific disease mechanisms.

**Pre-requisites: Permission of Instructor**

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: ☒ PASS/FAIL: ☐

**RESTRICTIONS ON ENROLLMENT (if any)**

14. **PREREQUISITES**

Acceptance in Professional Veterinary Medical Program or permission of instructor

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

15. **SPECIAL RESTRICTIONS, CONDITIONS**

Professional Veterinary Medical program student 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 in year one depending upon renovation completion.

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 course 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 on due to renovation completion. 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.

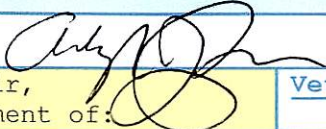
Biology & Wildlife, Chemistry or SNRE students may request admission to course for research or professional development. Vet Med will be providing curriculum in biomedical sciences which was not available previously.

**JUSTIFICATION FOR ACTION REQUESTED**

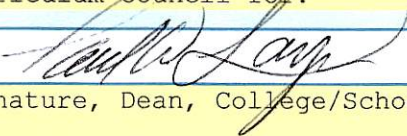
The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. 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	10-3-14
Signature, Chair, College/School Curriculum Council for:	<u>CNSM</u>	

	Date	10-3-14
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: <input type="checkbox"/> Curriculum Review <input type="checkbox"/> GAAC <input type="checkbox"/> Core Review <input type="checkbox"/> 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 640 Biology of Disease**

### **SYLLABUS – SPRING**

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

**1. Course Information:**

Title: **Biology of Disease**

Number: DVM 640

Credit: 5

Prerequisites: Successful completion of first semester of veterinary courses (DVM640) or permission of instructor (Biol6XX, MSL6XX)

Location: TBD

Meeting time: Four times a week for lectures, time TBD  
Once a week 3 hour labs

**2. Instructor Contact Information:**

Name: Dr. Molly Murphy

Office Location: 182 Arctic Health Research Building

Office Hours: TBD

Office Phone: 474-1928

Email: TBD

**3. Course Reading/Materials:**

Pathologic Basis of Veterinary Disease; McGavin & Zachary,  
5th Ed., 2011

Handouts/Outlines

**4. Course Description:**

The course will discuss basic principles of disease with special emphasis on processes likely to be encountered in veterinary practice. We will discuss these topics organized by underlying disease mechanism. The discussions will move from general cell mediated processes to more specific disease mechanisms.

**5. Course Goals:**

The goals for this course are to provide professional veterinary students with the foundations about basic disease mechanisms and to enable them to apply this knowledge in subsequent courses of anatomic pathology and clinical skills. The courses discusses how molecular and cellular mechanisms lead to pathological changes in tissue and ultimately to disease in domestic animals.

**6. Student Learning Outcomes:**

**At the end of this course students will be able to:**

1. Recognize the spectrum of basic morphologic changes that affect tissues.
2. Describe the molecular and cellular basis of these morphologic changes.
3. Establish a mental image of the microscopic appearance of selected classes of lesions.
4. Begin to describe and interpret gross and microscopic lesions.

**7. Instructional Methods:**



## Lectures and Laboratory

The lectures will emphasize selected aspects of microbiology, pathology (biology of disease) that are applicable to the practice of veterinary medicine. Lectures are intended to provide illustration, clarification, and updating of information. My philosophy of lecturing is that it is a coaching session to help you understand which information is most important and how to use it. But, the lecture is NOT meant to be the transfer of the exact body of knowledge that is useful in the practice of veterinary medicine. There is far more to learn than I can recite in our limited time together. In the laboratory the students will be presented with specimens exemplifying the material discussed in lectures.

### 8. Course Calendar:

For details, refer to the section "Tentative Lecture Schedule" in 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:

Exam format and weighting is at the discretion of the instructor. The formula used to establish point values for examination are: 4 points per lecture hour for new material and 1 point per lecture hour for the comprehensive portion of the final.

Exam 1	70 points
Exam 2	70 points
Exam 3	70 points
Final Exam	76 points
Lab	14 points
Course total	300 points

**LABS: LAB ATTENDANCE IS REQUIRED.** In general, it is anticipated that a worksheet will be completed, evaluated, and returned for each laboratory. Satisfactory work sheets will be credited 1 point.

## GRADING:

Grades will be calculated on  
100-point 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	%

Requests for excused absences must first be discussed with the instructor for the section to be missed. It is the responsibility of the student to provide an excused absence form to the instructor for signature. In the event of emergencies resulting in absence, it is the student's responsibility to contact the Department office and register the cause as soon as possible.

### 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 Schedule

Week 1	Introduction to Biotechnology Recombinant DNA technology Laboratory Safety - Lab
Week 2	Applications of Biotechnology Introduction to Genetic Disease Cytogenetics and Chromosomal Disorders Genetics Lab
Week 3	Mendelian Disorders Polygenic and Multifactorial Disorders



Introduction to Pathology  
Intro to Lesion Description Lab

Week 4  
Introduction to Pathology continued  
Central Theory of Cell Injury  
Reversible Cell Injury  
Irreversible Cell Injury  
Acute Cell Injury Lab

Week 5  
Necrosis and Apoptosis  
Pigments  
Mineralization  
Hemostasis  
Adaptation and Chronic Cell Injury Lab

Week 6  
Hemorrhage, Congestion and Edema  
Thrombosis and Embolism  
Introduction to Inflammation  
Disturbances of Circulation Lab

*Exam 1*

Week 7  
Patterns of Inflammation  
Inflammatory Mediators  
Phagocytosis and Microbial Killing  
Inflammation Lab

Week 8  
Chronic Inflammation  
Healing and Repair  
Type 1&2 Hypersensitivity Reactions  
Type 3&4 Hypersensitivity Reactions  
Inflammation Lab 2

SPRING BREAK

Week 9  
Autoimmune Disease Autoimmune Disease  
Pathogen:Host Interactions  
Inflammation Lab 3

Week 10  
Disorders of Growth  
Non-Neoplastic Disorders/Developmental  
Non-Neoplastic Disorders/Acquired  
Non-Neoplastic Disorders Lab

*Exam 2*

Week 11  
Pathogenesis of Neoplasia  
Pathogenesis of Neoplasia Classification  
Neoplasia Lab

Week 12  
Characteristics of Neoplasia  
Growth of Neoplasms

Neoplasia Lab 2

Week 13

Host/Neoplasm Interactions  
Neoplasms: Grading, Staging and Therapy  
Etiology of Neoplasia  
Neoplasia Lab 3

Week 14

Morphologic Diagnosis  
Morphologic Diagnosis Case Presentations  
Spontaneous Disease Lab

*Exam 3*

Week 15

*Final Exam as scheduled by University*