

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	cagriseto@alaska.edu	FACULTY CONTACT	Lisa Lunn

**1. ACTION DESIRED**

(CHECK ONE):

Trial Course ☐

New Course ☒

**2. COURSE IDENTIFICATION**

Dept

DVM

Course #

714

No. of Credits

4

Justify upper/lower division status & number of credits:

Professional Program required course – see CSU syllabus attached

**3. PROPOSED COURSE TITLE:**

Preventative Veterinary Medicine

**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 marked to its 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 beginning 2016

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

**7. SEMESTER & YEAR OF FIRST OFFERING** (FY2013-14 if approved by 3/1/2013; otherwise FY2014-15)

AY2016-2017

**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

6 weeks to full semester

OTHER FORMAT (SPECIFY)

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

Lecture

**9. CONTACT HOURS PER WEEK**

4

LECTURE  
HOURS/Weeks

0

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 P487 W, 0  
3 CREDITS  
Fisheries Management  
Offered Spring

RECEIVED

APR 15 2015

Dean's Office  
College of Natural Science & Mathematics



**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 NRJN F487. (3+0)**

**DVM 714 Department of Veterinary Medicine**

**4 Credit Offered Fall**

**Preventative Veterinary Medicine**

The course will provide a basic understanding of the principles of host/disease/agent interaction and essential steps in disease outbreak investigation. The beginning of the course will focus on calculation and interpretation of different measures of association among population-based data and will introduce concepts that are fundamental to accurate interpretation of diagnostic test results. Clinical and herd-based scenarios will be used for discussion of epidemiologic principles and features of zoonotic diseases that impact patient safety. We will cover issues that impact patient safety in clinical practice, infectious disease control programs, and biosecurity. The course will end with discussions of specific biosecurity and infectious disease control issues of relevance to global public health and to the health and safety of the nation's livestock.

**Pre-requisites: Good standing in Professional Veterinary Program**

**11. COURSE CLASSIFICATIONS:** Undergraduate courses only. Consult with CLA CURRICULUM COUNCIL to apply S or X classification appropriately; otherwise leave fields blank.

X = 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, FORM 6

W = Writing Intensive, FORM 7

X = Baccalaureate Core

**11.A Is course content aligned to national, state or disciplinary standards? If yes, a "STANDARDS" 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 lower or considers a Major Course Change - FORM 2 form.**

Letter:

X

PASS/FAIL:

**RESTRICTIONS ON ENROLLMENT (if any)**

**14. Prerequisites**

Professional Veterinary Medical program student 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**

0

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

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 to budget in second year will ease with second cohort of students

**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

☒ Yes

Yes

Department will keep complete library of required course materials in AYRE 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)

**21. POSITIVE AND NEGATIVE IMPACTS**

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

There should be no impact on other departments.

**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.

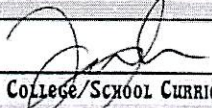
The course is required for second year veterinary students and the syllabus is provided by CSU CVMBS. The course has been approved by their accreditation requirements and will be offered at UAF as part of the 2+2 program (first two years at UAF and last two years at CSU).

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

 Date 4/14/15

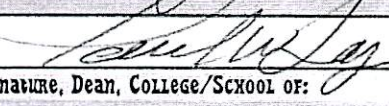
Signature, Chair, Program/Department of:

Veterinary Medicine

 Date 4/16/15

Signature, Chair, College/School Curriculum Council for:

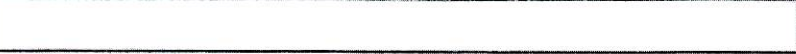
CSM

 Date 4/16/15

Signature, Dean, College/School of:

CSM

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 WHITTAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

5/21/2013



# **DVM 714 PREVENTATIVE VETERINARY MEDICINE**

## **SYLLABUS – FALL 2016**

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

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#### **1. Course Information:**

Title: Preventative Veterinary Medicine  
Number: DVM 714  
Credit: 4  
Prerequisites: Successful completion of first year veterinary courses  
Location: TBD  
Meeting time: Monday 10am-noon, Wednesday 10am-noon

#### **2. Instructor Contact Information:**

Name: Dr. Lisa Lunn  
Office Location: 182A Arctic Health Research Building  
Office Hours: By appointment  
Office Phone: 907-474-7926  
Email: [llunn2@alaska.edu](mailto:llunn2@alaska.edu)

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

#### **3. Course Reading/Materials:**

There are no required textbooks for this course. Course material will consist of written notes and PowerPoints. All course materials will be posted on Blackboard.

#### **4. Course Description:**

The course will provide a basic understanding of the principles of host/disease/agent interaction and essential steps in disease outbreak investigation. The beginning of the course will focus on calculation and interpretation of different measures of association among population-based data and will introduce concepts that are fundamental to accurate interpretation of diagnostic test results. Clinical and herd-based scenarios will be used for discussion of epidemiologic principles and features of zoonotic diseases that impact patient safety. We will cover issues that impact patient safety in clinical practice, infectious disease control programs, and biosecurity. The course will end with discussions of specific biosecurity and infectious disease control issues of relevance to global public health and to the health and safety of the nation's livestock.

#### **5. Course Goals:**

The goals for this course are to provide professional veterinary students with the foundations about basic disease mechanisms and principles of biosecurity, enabling them to apply this knowledge as clinical practitioners of the veterinary profession.

#### **6. Student Learning Outcomes:**

Upon successful completion of the course the student should have an understanding of:

- The fundamental concepts of the host-disease agent interaction, as well as the essential steps in disease outbreak investigation.

- Definition of epidemiology, the “5W’s of investigation”, epidemiologic triad, and the different types of hosts, pathogenicity, infectivity, and virulence
- Distinguishing between contagious and non-contagious agents, direct and indirect transmission
- Understand “R value” and how to calculate attack and case fatality risk
- Describe and provide analysis in disease outbreak investigation, construct an epidemic curve from outbreak data
- Understand types and distribution of data; differences between interval, ordinal, nominal data and normal, skewed distributions
- Calculation and interpretation of different measures of association among population-based data, as well as concepts that are fundamental to accurate interpretation of diagnostic test results.
  - Understand association and causation; definition of risk, risk factor, component, sufficient, necessary causes
  - Describe Koch’s postulates; calculate and interpret relative risks, odds ratios, attributable risks, and attributable fractions
  - Evaluation risk factors for disease by calculating and interpreting measures of association
  - Calculate and interpret standard parameters of diagnostic tests (sensitivity, specificity)
  - Differentiate between application of clinical tests for diagnostics and for screening
  - List the elements that determine sample size
  - Describe sources of bias in a study
- Specific scenarios wherein epidemiologic principles are applied to develop effective preventive strategies for common infectious and non-infectious diseases and how these applications apply to veterinary practice.
  - Differentiate between medical errors originating from errors in logic (reasoning) from those originating from systematic (organizational / operational) flaws; be able to describe methods to mitigate each type of error
  - Be able to diagram a clinical event (e.g. patient admission for an elective procedure) into its component steps and identify potential hazards associated with each step
  - Be able to construct a flow chart, communication script, redundancy protocol, or checklist for prevention of error in a common clinical event
  - List core and non-core vaccines for dogs and cats – identifying benefits and risks
  - List and describe the factors that influence the severity of the nematode burden in a livestock population
  - Describe the major clinical signs (humans and animals), routes of transmission, high-risk groups, reservoirs, endemic areas (US), and preventive strategies for tularemia, Q fever, and anthrax
  - List the consequences of nosocomial infections for veterinary practices and/or hospitals; identify common disease agents associated with nosocomial infections in veterinary teaching hospitals
- Issues that impact patient safety in clinical practice, infectious disease control programs, and biosecurity.
  - Discuss concerns for zoonotic infection with MRSA and MRSP, and control measures for spread in animal populations
  - Summarize the basis for concern about antimicrobial resistance in human and veterinary medicine; list and describe the Principles of Judicious Use



- for Veterinarians
- Explain how they may help practicing veterinarians prevent further spread of resistant bacteria
- Describe epidemiological features of foodborne diseases

**7. Instructional Methods:**

The course is designed to utilize didactic lectures, small group discussions, and case-based teaching. Students are expected to read assigned material before the start of class so that classroom time can be spent on active discussion and problem solving of assigned material. On-line quizzes and homework assignments will be utilized throughout the course to assess student learning. Blackboard (classes.uaf.edu) will be used for publishing of class notes, PowerPoints, supplemental reading material, as well as audio/visual teaching aids.

**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 and actively participate in discussions. 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.
- **Classroom Behavior:** Any type of behavior in the classroom that is disruptive, distracting, or disrespectful to the instructor or to students will not be tolerated and will result in dismissal from the classroom. This includes, but is not limited to, disrespectful comments, use of tobacco products, consumption of food, and use of cell phones or wireless devices for purposes other than note taking. Browsing of the internet (unless part of a required class activity) and text messaging is prohibited during class time.
- **Plagiarism:** Plagiarism is the overt or covert use of other people's work or ideas without acknowledgment 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 a grade of "F" in the course and/or referral to the university disciplinary committee.

**10. Evaluation:**

Students will have the opportunity to earn 200 points in the course.

- **Section quizzes: 100 points**
  - There will be four (4) post-section quizzes that reflect assigned reading material. Each quiz is worth twenty-five (25) points.
- **Homework assignments: 100 points**
  - There will be four (4) post-section homework assignments. The homework will involve application of section material as it relates to a case-based scenario. Each homework assignment is worth twenty-five (25) points.
- **Final examination: 100 points**



- The final examination will be cumulative in nature. The format will include short answer/essay assessments as well as multiple choice questions.

- Grading Scale: Grades will be calculated as follows

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	%

#### 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. Equal access to the course will be provided to all students. If you have a disability (including learning disabilities) it is your responsibility to inform the instructor during the first week of class so that you're specific need may be accommodated. If you have not already done so, you will also need to contact UAF's Office of Disability Services by email at [uaf-disabilityservices@alaska.edu](mailto:uaf-disabilityservices@alaska.edu), by phone at (907)474-5655, or by TTY at (907)474-1827.

#### Tentative Lecture Schedule:

Week	Lecture Topics
1	Course introduction and outline: What is epidemiology and preventative medicine Disease patterns in populations – general, companion animal, livestock and wildlife
2	Disease outbreak investigation - general companion animal livestock and wildlife
3	Types and distribution of data Statistics for the practitioner
4	<b>EXAM 1</b> Association and Causation, Measures of Association, Interpreting diagnostic tests
5	Interpreting diagnostic tests 3 Sample size and power Study Design 1
6	<b>EXAM 2</b> Prevention of logical and systematic errors in clinical practice,



	Sources of clinical errors: case scenarios, Understanding and implementing infection control: rabies
7	Applied population medicine: small animal vaccination strategies, pet overpopulation, ruminant example
8	Tularemia, Anthrax and Q Fever, Epidemiology of wildlife diseases: a pathologist's perspective, Components of biosecurity program
9	Companion animal zoonoses, Farm animal zoonoses, Applied population medicine: exotic mammals, avian / reptile example
10	Zoonoses of exotic animals: infection control at zoos, Applied population medicine: calves disease investigation examples
11	Applied population medicine: tuberculosis in livestock, humans and wildlife, Applied wildlife research, Infection control problems: case examples
12	<b>EXAM 3</b> , Understanding and implementing infection control: MRSA, Veterinary practice and human health: antimicrobial resistance
13	Foodborne diseases <b>EXAM 4</b>
14	Conducting Field Investigation: dairy and beef example
	<b>Final Examination as scheduled by University</b>