**TRIAL COURSE OR NEW COURSE PROPOSAL**

**SUBMITTED BY:**
- **Department:** Veterinary Medicine
- **Prepared by:** Cathy Griseto
- **Email Contact:** cagriseto@alaska.edu
- **College/School:** CNSM
- **Phone:** 474-1928
- **Faculty Contact:** Ors Petnehazy & Arleigh Reynolds, Assoc Dean Vet

1. **ACTION DESIRED**
   - (CHECK ONE):
     - Trial Course
     - New Course [X]

2. **COURSE IDENTIFICATION**
   - Dept: DVM
   - Course #: 625
   - No. of Credits: 2
   - Professional Program required course – see CSU syllabus attached
   - Justify upper/lower division status & number of credits:

3. **PROPOSED COURSE TITLE:**
   - Principles of Diagnostic Imaging

4. **To be CROSS LISTED?**
   - YES / 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
   - If yes, Dept: [ ]
   - Course #: [ ]
   - How will the two course levels differ from each other? How will each be taught at the appropriate level?

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**
   - AY2015-2016

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

8. **COURSE FORMAT:**
   - COURSE FORMAT:
     - [ ] 1
     - [ ] 2
     - [ ] 3
     - [x] 4
     - [ ] 5
     - [x] 6 weeks to full semester
   
   - OTHER FORMAT (specify)

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

9. **CONTACT HOURS PER WEEK:**
   - [ ] 2 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 internships = 1 credit. This must match with the syllabus. See http://www.uaf.edu/ufgov/faculty-senate/curriculum/course-degree-procedures/-guidelines-for-computing/ for more information on number of credits.
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 F151X 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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Credits</th>
<th>Offered Semester</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVM 625</td>
<td>Department of Veterinary Medicine</td>
<td>2</td>
<td>Fall</td>
<td>Principles of Diagnostic Imaging to identify structures on radiographic images. The course will include an introduction to Radiographic anatomy of small and large animals; introduction to X-Ray, MRI and CT. The course will help to place the anatomical knowledge into clinical context. <strong>Pre-requisites:</strong> Acceptance into Professional Veterinary Medical Program</td>
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11. **COURSE CLASSIFICATIONS:** Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.  

<table>
<thead>
<tr>
<th>H = Humanities</th>
<th>S = Social Sciences</th>
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Will this course be used to fulfill a requirement for the baccalaureate core? **IF YES, attach form.**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>X</th>
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</table>

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.  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>X</th>
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12. **COURSE REPEATABILITY:**  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>X</th>
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Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

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<tr>
<th>TIMES</th>
<th>CREDITS</th>
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</table>

How many times may the course be repeated for credit?

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

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

<table>
<thead>
<tr>
<th>TIMES</th>
<th>CREDITS</th>
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</table>

13. **GRADING SYSTEM.** Specify only one. **Note:** Changing the grading system for a course later on constitutes a Major Course Change – **Format 8 form.**  

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<tr>
<th>LETTER</th>
<th>PASS/FAIL</th>
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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 course.

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?  

<table>
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<tr>
<th>Yes/No</th>
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Yes
17. PREVIOUS HISTORY
Has the course been offered as special topics or trial course previously? 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 (khjensen@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.

<table>
<thead>
<tr>
<th>No</th>
<th>x</th>
<th>Yes</th>
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</table>

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 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).

See attached

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.

<table>
<thead>
<tr>
<th>Signature, Chair, Program/Department of:</th>
<th>Veterinary Medicine</th>
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<tbody>
<tr>
<td>Date</td>
<td>7/7/14</td>
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<th>Signature, Chair, College/School Curriculum Council for:</th>
<th>CNSM</th>
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<tr>
<td>Date</td>
<td>9/22/14</td>
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<th>Signature, Dean, College/School of:</th>
<th>CNSM</th>
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<td>Date</td>
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<th>Signature of Provost (if above level of approved programs)</th>
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<td>Date</td>
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**ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE**

<table>
<thead>
<tr>
<th>Signature, Chair, Faculty Senate Review Committee:</th>
<th>Curriculum Review</th>
<th>GAAC</th>
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<tbody>
<tr>
<td></td>
<td>Core Review</td>
<td>SADAC</td>
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<td>Date</td>
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**ADDITIONAL SIGNATURES:** (As needed for cross-listing and/or stacking)

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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":

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.

5/21/2013
DVM 625 PRINCIPLES OF DIAGNOSTIC IMAGING

SYLLABUS – FALL

Department of Veterinary Medicine, University of Alaska Fairbanks

1. **Course Information:**
   - Title: Principles of Diagnostic Imaging
   - Number: DVM 625
   - Credit: 2
   - Prerequisites: Successful application to Professional veterinary medical program
   - Location: TBD
   - Meeting time: Twice a week

2. **Instructor Contact Information:**
   - Name: Dr. Ors Petnehazy
   - Office Location: TBD
   - Office Hours: By appointment
   - Office Phone: TBD
   - Email: opetnehazy@alaska.edu

   - Name: Dr. Sarah Love
   - Office Location: 182 Arctic Health Research Building
   - Office Hours: By appointment
   - Office Phone: TBD
   - Email: sblove@alaska.edu

   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:**
   - Textbook Title: Thrall’s Textbook of Veterinary Diagnostic Radiology
   - Publisher: Elsevier
   - ISBN: 9781455703647

   - Textbook Title: Radiation and Xrays in Techniques of Veterinary Radiography
   - Editors: Morgan JP
   - Edition: 5th Edition
   - Publisher: Iowa University Press

DVM 625 Syllabus
Page 1 of 4
CD on Interactive Programs on Veterinary Radiology, Kraft, Park et al, Colorado State University. This CD can also be purchased at CSU in the Vet Text and will be used in all four years of your curriculum. It is PC compatible only! No MAC version is available. If you are a MAC user, you can view this program on the lab computers.

4. Course Description:
The course will include an introduction to Radiographic anatomy of small and large animals; introduction to X-Ray, MRI and CT. The course will help to place the anatomical knowledge into clinical context.

5. Course Goals:
This course will introduce students to the basic physics of modern imaging systems and basic image interpretations. The course will help students to identify the structures on radiographic images (digital or film images).

6. Learning outcomes:
The students will be able to explain the function of common imaging technology. At the end of the course the students will be able to describe how an animal must be positioned to obtain the standard radiographic views for each body area. The students will be expected to name and locate structures on radiographic (and where applicable, ultra-sonographic) images during exams. The student will be able to transfer his or her knowledge about anatomy in a clinical context through imaging technology.

7. Instructional Methods:
This lecture based 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) 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.

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 to 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 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 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 an “F” in the course and/or referral to the university disciplinary committee.

10. Evaluation:
  • Grade Distributions:
    Midterm Exam  100 points
    Final Exam  100 points
    Total points  200

  There will be one midterm exam and one final exam. Grades will be posted on Blackboard you should always confirm that your grade is posted correctly.
  Only bring the materials needed for your exam on exam dates. Cell phones must be stored out of sight and turned off. If you are found cheating, you will receive a zero for the exam and will be reported to university disciplinary committee.

  • 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:
    Grades will be calculated on a 100-point scale.
    | Grade | Minimum Score | Percentage |
    |-------|---------------|------------|
    | 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 Schedule

Week 1  Introduction to course, Intro xray physics, Fundamentals of Radiologic interpretation
Week 2  Beam factors affecting image Interaction of x-rays with the patient
Week 3  Films, cassettes and screens, Film ID and markers Digital Radiography
Week 4  Accessory equipment, filtration, grids and film processing Technique charts and technical errors
Week 5  Contrast agents and examinations Nuclear Medicine
Week 6  Introduction to MRI and CT Radiographic anatomy of the small animal forelimb
Week 7  Midterm Ultrasound introduction, equipment, basic physics and artifacts
Week 8  Sonographic anatomy of the liver, spleen, urinary and GI tracts Radiographic Anatomy small animal hindlimb/pelvis
Week 9  Radiographic Anatomy Equine foot and fetlock Radiographic Anatomy Equine forelimb and hindlimb
Week 10 **Cases – Forelimb, hindlimb, pelvis** Radiographic anatomy of the SA thorax – non-cardiovascular
Week 11 Radiographic anatomy of the SA thorax – heart and vessels Radiographic anatomy of the small animal spine
Week 12 **Cases – Abdomen and spine** Radiographic anatomy of the small animal abdomen – part I
Week 13 Radiographic anatomy of the small animal abdomen part II Radiographic anatomy of the equine thorax, skull and guttural pouches
Week 14 Radiography of the small animal skull, nasal cavity **Cases – thorax, skull and nasal cavity**