

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
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SUBMITTED BY:

Department	Veterinary Medicine	College/School	CNSM
Prepared by	Cathy Griseto	Phone	474-1928
Email Contact	cagriseto@alaska.edu	Faculty Contact	Arleigh Reynolds, Assoc Dean Vet Med

1. ACTION DESIRED

(CHECK ONE):

Trial Course

New Course

X

2. COURSE IDENTIFICATION:

Dept

DVM

Course #

623

No. of Credits

2

Justify upper/lower division status & number of credits:

Professional Program required course – see CSU syllabus attached

3. PROPOSED COURSE TITLE:

Veterinary Nutrition and Metabolism

4. To be CROSS LISTED?
YES/NO

YES

If yes, Dept:

MSL

Course #

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

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 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 623 Department of Veterinary Medicine

2 Credit (2+0) Offered Spring

Veterinary Nutrition and Metabolism

The course will examine the nutritional needs of major species of veterinary importance. Discussion will revolve around specific nutritional needs as they relate to life-stages and production status of monogastric and ruminant animals. Course topics will deal with the classification and function of nutrients, digestive processes (monogastric, ruminant, hind-gut fermenters), evaluation of feedstuffs and feed labels, and principles of disease related to nutritional deficiency as well as nutritional excess.

Pre-requisites: Successful completion of first Semester Veterinary Courses

DVM 6XX Marine Science and Limnology

2 Credit (2+0) Offered Spring

Veterinary Nutrition and Metabolism

The course will examine the nutritional needs of major species of veterinary importance. Discussion will revolve around specific nutritional needs as they relate to life-stages and production status of monogastric and ruminant animals. Course topics will deal with the classification and function of nutrients, digestive processes (monogastric, ruminant, hind-gut fermenters), evaluation of feedstuffs and feed labels, and principles of disease related to nutritional deficiency as well as nutritional excess.

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. In addition the UAF library has additional resources as per 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 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).

[See revised on previous page]

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APPROVALS: Add additional signature lines as needed.

Signature, Chair, Program/Department of: Veterinary Medicine Date: 9-30-14

Signature, Chair, College/School Curriculum Council for: CNSM Date: 9-30-14

Signature, Dean, College/School of: CNSM Date: 10/9/14

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:

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

	Date	
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Signature, Chair

Faculty Senate Review Committee: ☐ Curriculum Review ☐ GAAC

☐ Core Review ☐ SADAC

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

	Date	9/30/14
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Signature, Chair, Program/Department of:

	Date	9-30-14
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Signature, Chair, College/School Curriculum Council for:

CNSM

	Date	
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Signature, Dean, College/School of:

Duplicates

ATTACH COMPLETE SYLLABUS (as part of this application). This list is online at:

<http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/uaf-syllabus-requirements/>

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

SYLLABUS CHECKLIST FOR ALL UAF COURSES

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

1. Course information:

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

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

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

3. Course readings/materials:

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

4. Course description:

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

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

6. ☐ Student Learning Outcomes (more specific)

Instructional methods:

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

8. Course calendar:

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

9. Course policies:

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

10. Evaluation:

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

http://www.uaf.edu/files/uafgov/Info-to-Publicize-C_Grading-Policy-UPDATED-May-2013.pdf

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

Revised 4/17/2015

VM 623 VETERINARY NUTRITION AND METABOLISM

SYLLABUS – SPRING

Department of Veterinary Medicine, University of Alaska Fairbanks

1. Course Information:

Title: Veterinary Nutrition and Metabolism
Number: DVM 623 MSL 6XX
Credit: 2
Prerequisites: Successful completion of first semester of veterinary courses (DVM 623), or permission of instructor (MSL6XX)
Location: TBD
Meeting time: Class is held twice per week Tue/Thur
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2. Instructor Contact Information:

Name: Dr. Arleigh Reynolds
Office Location: 182 Arctic Health
Office Hours: By appointment
Office Phone: 907-474-1928
Email: aireynolds@alaska.edu

Telephone is the best way to reach the instructor. Please leave a message. You should receive a response to your call within 24 hours.

3. Course Reading/Materials:

There are no required textbooks for this course. Due to the diversity of species covered, we will be utilizing materials from various sources. Course materials will consist of written notes, PowerPoints, and journal articles. All course information will be posted on Blackboard. To prepare for lecture, students should review the provided course notes and materials posted on Blackboard. If a lecturer provides or lists required reading materials for an upcoming lecture, these should be reviewed as directed. The library catalogue contains further material for background reading.

4. Course Description:

The course will examine the nutritional needs of major species of veterinary importance. Discussion will revolve around specific nutritional needs as they relate to life-stages and production status of monogastric and ruminant animals. Course topics will deal with the classification and function of nutrients, digestive processes (monogastric, ruminant, hind-gut fermenters), evaluation of feedstuffs and feed labels, and principles of disease related to nutritional deficiency as well as nutritional excess.

5. Course Goals:

The course is designed to stimulate critical thinking in nutrition of companion animals and livestock. Course concepts will delve into the interaction between the principles of nutrition on health and the development of disease (subclinical and clinical). Application of physical examination, life-stage, and production status of the veterinary patient will be stressed in the identification of disease conditions

resulting from nutritional issues. Metabolism of nutrients related to digestion, assimilation, and nutrient availability will be discussed. Specific metabolic conditions related to veterinary patients (acetonemia, hepatic encephalopathy, hepatic lipidosis, and nutritional myodegeneration) will be presented. General feeding principles of healthy animals and diet analysis to promote health will be covered. The course will end with dietary needs of the sick and convalescing veterinary patients.

6. Student Learning Outcomes:

After completing this course students should be able to:

- I. Explain the interaction of nutrition in health and disease
- II. Estimate caloric requirements based on signalment, physiological state, health status
- III. Evaluate adequacy of ration and feedstuffs as to the quality and quantity to be fed
- IV. Read a pet food label and use info to recommend food intake
- V. Comprehend the relationship between nutrition and disease and be able to determine if an observed or measured condition is related to improper or inadequate nutrition
- VI. Understand how to monitor the efficacy of a feeding program through observation and diagnostic tests
- VII. Evaluate special nutritional situations (diseased or highly stressed animals)

7. Instructional Methods:

The course is designed based on the scientific teaching method. This method includes active learning and group activities as well as formative assessments. The students are expected to read assigned material ahead of class so that class time can be spend 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 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 can also check grades and make sure that information related to their record is accurate.

8. Course Calendar:

Week	Topic
1	Course Introduction – Basis of Veterinary Nutrition, Water as a nutrient
2	Protein - Monogastric and Ruminant
3	Fat, Carbohydrates
4	Disorders of Energy Metabolism Ketosis Rumen Acidosis
5	Hepatic Lipidosis and Pregnancy Toxemia
6	Insulin, Diabetic Ketoacidosis
7	Thyroid Disorders, Glucocorticoid Disorders
8	Nutrition and Skin, Renal and Hepatic Diseases
9	Body Condition Scoring, Monitoring Populations by Body Examination
10	Monitoring Populations by Diagnostic Testing
11	Nutrition of Pet Birds and Poultry, Small Mammal Nutrition
12	Feeding Healthy Dogs and Cats, managing obese pets
13	Feeding Healthy Horses and Ruminants (cattle, sheep, goats)
14	Reading feed labels (companion animal and livestock) Mineral Deficiencies, Nutrition & Critical Care

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:

- Grade Distributions:
- Examination 1 25%
- Examination 2 30%
- Examination 3 30%
- Homework Assignment 1 5%
- Homework Assignment 2 5%
- Homework Assignment 3 5%

- 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	%

Final grades with decimals greater than or equal to .50 will be rounded up to the next whole number.

Incomplete (I) grades will be given only if a student does not complete the required exams because of illness or extenuating circumstances. Prompt communication directly with the course coordinators and/or Department of Vet Med Office is required to document any health problems or other circumstances that may prevent a student from attending class or completing the examinations or homework assignments (see below). Ranks will be assigned according to the final grade score.

- Exam Schedule

Examination 1 (On-line, open-note) will include 25% of the total possible points for the course. It will cover materials covered in the course notes, supplemental reading materials, and classroom lectures for weeks 1 through 4. Examination dates will be posted on Blackboard.

Examination 2 (On-line, open-note) will include 30% of the total possible points for the course. It will cover materials covered in the course notes, supplemental reading materials, and classroom lectures for weeks 5 through 9. Examination dates will be posted on Blackboard.

Examination 3 (On-line, open-note) will include 30% of the total possible points for the course. It will cover materials covered in the course notes, supplemental reading materials, and classroom lectures for lectures 10 through 14. Examination dates will be posted on Blackboard.

Homework: There will be 3 homework assignments for this course, each worth 5 percent. Specific information regarding the homework duties and due dates will be discussed and posted on Blackboard prior to the homework being assigned.

Assignment #1 can be completed as a group effort.
Please record all student names on the submission.

Please work on assignments #2 and #3 alone. Each homework assignment will include instructions with whom you should contact if you have any questions about the assignment.

Homework will be submitted through Blackboard. Failure to turn in a homework assignment will result in 0 / 5 percent for that assignment. Late submissions will be penalized by subtracting 25% from the grade given to the assignment (i.e. assigned grade will be multiplied by 0.75 to determine the homework assignment grade that is recorded in the course grade book).

- Examinations: Important Details

1. There are three examinations in the course. The material covered in each examination is explained below and reiterated on the course schedule. Examinations will cover materials in the course notes as well as topics described and discussed during lectures. If supplemental reading materials are provided in class or posted on Blackboard, the material contained therein may be included on the examination.

2. Examinations will be open-note. Please work alone on the examination and do not discuss the details of examination content with other students. These three examinations will be conducted on Blackboard. You may work on a computer in a remote location or on campus. Because of past problems with instability of off-campus connections, we strongly recommend that you take the examination from a computer on campus. The exams will remain open during the entire time period, allowing you to complete some questions, log off, and log back on later to complete others or recheck your answers within the designated open period for each exam.

Submitting the examination for grading is necessary (see below).

4. Examination questions will be multiple choice, matching, and/or short answer. Multiple choice questions will be designed to reflect the type of questions students will encounter on the North American Veterinary Licensing Examination (NAVLE). After each examination period, the course coordinators may be contacted by email if you have any questions about examination content. Student inquiries will then be forwarded to the appropriate lecturer for feedback. All concerns about examination questions will be tallied, and any adjustments to examination scores due to ambiguous questions or answers will be made following the exam. The entire class will be notified of such adjustments by email.

5. If personal problems, family emergencies, etc. arise that prevent you from completing the examination, or unavoidable conditions arise that are likely to adversely affect your performance on the examination, you must contact one of the course coordinators *as soon as possible* to request arrangements for taking the examination at another time. Such requests will not be granted if a student makes such a request after having completed the examination.

A calculator with a power function will be needed for Examination 3.

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 Disability Services by email at uaf-disabilityservices@alaska.edu, by phone at (907)474-5655, or by TTY at (907)474-1827.