

# Add Course Request

Submitted on: 2012-04-26 11:28:54

1. COURSE SUBJECT	ANSC
2. COURSE NUMBER (OR PROPOSED NUMBER)	1111
3. COURSE TITLE	Principles of Animal Nutrition and Feeding
4. INITIATING DEPARTMENT or UNIT	Animal Science
5. NAME OF SUBMITTER	Kristen E Govoni
6. PHONE of SUBMITTER	Phone: +1 860 486 2480
7. EMAIL of SUBMITTER	Email: kristen.govoni@uconn.edu
8. CONTACT PERSON	Gary Kazmer
9. UNIT NUMBER of CONTACT PERSON (U-BOX)	4040
10. PHONE of contact person	Phone: 486-1011
11. EMAIL of of contact person	Email: gary.kazmer@uconn.edu
12. Departmental Approval Date	3/23/12
13. School/College Approval Date	4/20/12
14. Names and Dates of additional Department and School/College approvals	
15. Proposed Implementation Date	Term: Fall, Year: 2012
16. Offered before next printed catalog is distributed?	Yes
17. General Education Content Area	
18. General Education Skill Code (W/Q). Any non-W section?	None
19. Terms Offered	Semester: Spring Year: Every_Year
20. Sections	Sections Taught: 3
21. Student Number	Students/Sections: 100
22. Clarification: This course will be replacing an existing nutrition course (ANSC 2111) which currently has an enrollment of about 100 students and 3 laboratory sections. The three sections are necessary to accommodate all students in the laboratory activities.	
23. Number of Credits	3

	if VAR Min: Max: credits each term
<b>24. INSTRUCTIONAL PATTERN</b> 2 class periods per week (50 minutes each) 1 laboratory/discussion period per week (2 hours)	
25. Will this course be taught in a language other than English?	No If yes, then name the language:
26. Please list any prerequisites, recommended preparation or suggested preparation: None	
27. Is Instructor, Dept. Head or Unit <b>Consent Required</b> ?	No
28. Permissions and Exclusions:	
29. Is this course <b>repeatable for credit</b> ?	No If yes, total credits allowed: Allow multiple enrollments in same term?
30. <b>Grading Basis</b>	Graded
31. If satisfactory/unsatisfactory grading is proposed, please provide <b>rationale</b> :	
32. Will the course or any sections of the course be taught as Honors? AsHonors	
33. Additional Details:	
34. Special Attributes:	
<b>35. REGIONAL CAMPUS AVAILABILITY:</b> This course is not generally available at the Regional Campuses due to the use of the animals at the Storrs campus (cattle, sheep, and poultry).	
<b>36. PROVIDE THE PROPOSED TITLE AND COMPLETE CATALOG COPY:</b>  ANSC 1111. Principles of Animal Nutrition and Feeding. Second semester. Three credits. Two class periods and one 2-hour discussion and laboratory period. Taught concurrently with SAAS 113. Instructor TBD. This course focuses on digestive anatomy of various species and the classes of nutrients including their digestion, metabolism and sources. Nutrient requirements and feeding standards for various classes of livestock for reproduction, lactation, growth, work and maintenance are included as well as companion animals, exotics and aquatics. Classes of feedstuffs, their characteristics and proper utilization will be discussed. Attention will also be given to characteristics of common feedstuffs and to formulating rations and nutritional programs for animal enterprise.	
<b>37. RATIONALE FOR ACTION REQUESTED</b>  The course is being added to our curriculum to replace the current animal nutrition course (ANSC 2111). After review of our curriculum, we have determined that we are lacking a fundamental, introductory nutrition course in the first year. Therefore, we are planning to eliminate ANSC 2111 (Principles of Animal Nutrition), add ANSC 1111 (Principles of Animal Nutrition and Feeding) and develop additional upper level nutrition courses. This course is appropriate for 1000 level because it will be offered as an introductory basic nutrition and feeds and feeding course for freshman. It will provide a broad overview of classes of nutrients as well	

as practical applications such as ration formulation and feeding practices for livestock. A course similar to this is not taught by other departments, so it should not have a direct impact on other departments. PVS students on a pre-vet track often take the ANSC 2111 to meet vet school requirements. This course will also meet vet-school requirements for animal nutrition and all students will have access to this course. In addition, this course will be concurrently taught with the current course SAAS 113 (Principles of Animal Nutrition). The combination of these two courses is acceptable since this is a 1000 level course and will cover similar concepts currently taught in SAAS 113.

**38. SYLLABUS:**

Online URL: ( [https://web2.uconn.edu/senateform/request/course\\_uploads/keg95003-1335454134-ANSC 1111-SAAS 113 NEW Syllabus.doc](https://web2.uconn.edu/senateform/request/course_uploads/keg95003-1335454134-ANSC_1111-SAAS_113_NEW_Syllabus.doc) )

**39. Course Information: ALL General Education courses, including W and Q courses, MUST answer this question**

Please see syllabus for information.

**40. Goals of General Education: All Courses Proposed for a Gen Ed Content Area MUST answer this question**

**41. Content Area and/or Competency Criteria: ALL General Education courses, including W and Q courses, MUST answer this question.: Specific Criteria**

- a. **Arts and Humanities:**
- b. **Social Sciences:**
- c. **Science and Technology:**
  - i. **Laboratory:**
- d. **Diversity and Multiculturalism:**
  - 43. **International:**
- e. **Q course:**
- f. **W course:**

**42. RESOURCES:**

Does the department/school/program currently have resources to offer the course as proposed  
YES

If NO, please explain why and what resources are required to offer the course.

**43. SUPPLEMENTARY INFORMATION:**

**ADMIN COMMENT:**

Senate approved new course 9/17/2012.

**PRINCIPLES OF ANIMAL NUTRITION AND FEEDING**

# ANSC 1111/SAAS 113, Spring 2013

## COURSE SYLLABUS

**Instructor:** TBD

**TAs:** TBD

**Lectures:** Monday and Wednesday, Time TBC, Location: TBD

**Labs/Discussion:** Day TBD

**Textbook:** 1) Basic Animal Nutrition and Feeding, 5<sup>th</sup> Edition, Pond, Church, Pond and Schoknecht.  
2) i-clicker2 (clicker). These may be purchased at the CO-OP and must be registered in order to receive participation credit. For technical issues, please contact the Learning Resource Center 860-486-1187 or tech support 866-209-5698. I will NOT be able to assist you with registering your clicker.

**Course Description:** This course focuses on digestive anatomy of various species and the classes of nutrients including their digestion, metabolism and sources. Nutrient requirements and feeding standards for various classes of livestock for reproduction, lactation, growth, work and maintenance are included as well as companion animals, exotics and aquatics. Classes of feedstuffs, their characteristics and proper utilization will be discussed. Attention will also be given to characteristics of common feedstuffs and to formulating rations and nutritional programs for animal enterprise.

### Course Objectives:

1. Identify and describe the functions of the 7 classes of nutrients.
2. Identify and describe the various gastrointestinal tracts for monogastrics, ruminants, pseudoruminants, and birds.
3. Formulate and balance a ration.
4. Identify nutrient deficiencies and toxicities.
5. Become familiar with the difference classes of feedstuffs, their characteristics and when they are utilized.
6. Gain a better appreciation for nutrient requirements and scientific research needed for livestock, companion animals and humans.

<b>Grading</b>	<b>% of Total Grade</b>
Exam 1	20%
Exam 2	20%
Final Exam (cumulative)	25%
Lab Reports	25%
Ration project	5%
In class participation	5%

**Exams (65%):** Two exams will be given during the semester based on the lectures given prior to each exam. The final exam will be a cumulative exam with about 50% of the material from the last third of the course and about 50% of the exam will cover the entire course. Exams will test the knowledge you have gained from lectures, textbook chapters and laboratory/discussions. Although textbook chapters have been assigned, additional information will be provided in lectures and lab/discussions, so you are strongly encouraged to attend all classes. It will be difficult to do well in this course if you do not attend the lectures and lab/discussions. All exams will be taken at the scheduled time. If a medical excuse is presented or you are excused for a trip by prior arrangement, a make-up exam will be scheduled. Otherwise, a zero will be recorded for the missed exam.

**Lab Reports (25%):** Five formal lab reports will be due on the dates listed on the schedule. These need to be typed (unless otherwise noted) and handed in on the date listed for full credit. Late reports will lose 10% for each day late and will not be accepted once they are more than 1 week late.

**Ration Project (5%):** This will be a group project with 3 students working together. Choose a species and physiological stage and develop a feeding program based on nutrient requirements, available feedstuffs and number of animals to be fed. Include daily cost of feeding animals and yearly cost. Develop a 3 page paper describing the ration and benefits of your feeding program.

**In class participation (5%):** iclicker2 units (clickers) will be used during lectures to assess your understanding of the material presented. Your grade will be determined based on participation, not a right or wrong answer to questions. Students will be allowed to miss two days of participation without

penalty, therefore no make-ups will be provided. Your participation will be recorded in the HuskyCT grade book. Please check this regularly to ensure you are receiving proper credit.

**HuskyCT:** A course site has been created on HuskyCT. Class notes, lab assignments and additional information needed for class will be posted. In addition, grades will be posted in the HuskyCT grade book for you to review. Login using your netid and password at <http://huskyct.uconn.edu>. Although I have an email account on HuskyCT, I strongly encourage you to email me at the address above as I do not check the HuskyCT email as often.

### **Classroom rules of conduct**

1. Please turn off cell phones and MP3 players during class.
2. Basic calculators should be used for calculations. Cell phones will not be allowed.
3. Academic misconduct in any form is in violation of the University of Connecticut Student Code and will not be tolerated. This includes, but is not limited to: copying or sharing answers on tests, quizzes and assignments, plagiarism, and having someone else do your academic work. Please see the student code at: [http://www.dos.uconn.edu/student\\_code.html](http://www.dos.uconn.edu/student_code.html) for details.
4. Absence of students due to religious beliefs/trips of an academic nature: Students anticipating such a conflict should inform their instructor in writing within the first three weeks of the semester, and prior to the anticipated absence, and should take the initiative to work out with the instructor a schedule for making up missed work.
5. Wear appropriate attire to labs. No open-toed shoes in laboratory or at animal units (if you do not follow this rule, you will not be allowed to participate and will receive a zero for that lab). Be aware of weather conditions for barn visits and dress appropriately (no rain or snow dates).

**Special needs:** If you have special needs, please contact the instructor so that arrangements can be made.

**PRINCIPLES OF ANIMAL NUTRITION AND FEEDING**

**ANSC 1111/SAAS 113, Spring 2013**

**LECTURE SCHEDULE**

<u>Week</u>	<u>Topic</u>	<u>Chapter(s)</u>
1	Introduction	1 - 2
2	Water	6
	Anatomy and digestion	4
3	Carbohydrate digestion and metabolism	7
	Carbohydrate feedstuffs	19
4	Lipid digestion and metabolism	8
	Lipid feedstuffs	19
5	Protein digestion and metabolism	9
	Proteins feedstuffs	19
6	<b>EXAM 1</b>	
	Fat soluble vitamins	14
7	Water soluble vitamins	15
	Macro Minerals	11
8	Micro Minerals	12 - 13
	Energy metabolism	10
9	Regulation of nutrient partitioning	16
	Factors affecting feed consumption	17

10	Nutritional disorders and disease	
	<b>EXAM 2</b>	
11	<b>Spring Break (no class)</b>	
	<b>Spring Break (no class)</b>	
12	Swine nutrition	25
	Zoo/exotics nutrition	30
	(Ms. Sackrider, Beardsley Zoo)	
13	Companion Animal Nutrition	28
	(Dr. Doug Yanik, P&G Pet Care)	
	Equine Nutrition (Dr. Nadeau)	27
14	Small ruminant nutrition	24
	Poultry (Dr. Darre)	26
15	Aquatic animal nutrition (Dr. Lisa Mazzaro)	29
	Dairy nutrition (Dr. Andrew)	23

**PRINCIPLES OF ANIMAL NUTRITION AND FEEDING**

**ANSC 1111/SAAS 113, Spring 2013**

**LAB/DISCUSSION SCHEDULE**

<u>Week</u>	<u>Topic</u>	<u>Chapter(s)</u>
1	Water case study	6
2	Digestive anatomy	4
	- meet in the <u>Ratcliff Hicks Arena</u>	



3	Carbohydrate metabolism or Lipids (assignment 7 or 8 for lab for this week will be handed out in class)  – <b>close-toed shoes required for Carbs</b>  - <b>Digestive anatomy lab due (LAB 1)</b>	
4	Carbohydrate metabolism or Lipids (assignment 7 or 8 for lab for this week will be handed out in class) - <b>Carbohydrate metabolism lab due</b>  – <b>close-toed shoes required for Carbs</b>  <b>for group 1 (LAB 2)</b>	
5	Feed stuffs and analysis; introduction to ration calculations  - <b>Carbohydrate metabolism lab due</b>  <b>for group 2 (LAB 2)</b>	20 – 21
6	Calculations for energy expenditure	5
7	Pearson square and ration formulations	20 – 21
8	Forage analysis (Dr. Joyce Meader)  - meet in the <u>KDC</u>	19
9	Field Trip – Central CT Farmers Co-op  - meet in lot <u>between Ratcliff Hicks and WB Young building</u>  - <b>Forage analysis lab due (LAB 3)</b>	20
10	Formulating rations: how to meet requirements  based on breed, gender, physiological state  - <b>Field Trip lab due (LAB 4)</b>	20 – 21
11	<b>Spring break – no class</b>	

12	Beef and sheep nutrition, feeding and management (Ms. Cole) - meet at the <u>Beef barn</u>	22, 24
13	Horse body condition and ration formulation (Dr. Nadeau) - meet at the <u>Horsebarn Unit 1</u>	27
14	Poultry nutrition, feeding and management (Dr. Darre) - meet at the <u>KDC classroom</u>	26
15	Ration formulation using Spartan (Dr. Andrew) - <b>Ration formulation lab <u>due at end of class</u> (LAB 5)</b>	23