

Status: PENDING

PROGRAM REQUEST
Dairy Science Minor

Last Updated: Pfister, Jill Ann
03/19/2013

Fiscal Unit/Academic Org	Animal Sciences - D1132
Administering College/Academic Group	Food, Agric & Environ Science
Co-administering College/Academic Group	
Semester Conversion Designation	New Program/Plan
Proposed Program/Plan Name	Dairy Science Minor
Type of Program/Plan	Undergraduate minor
Program/Plan Code Abbreviation	DAIRY-M
Proposed Degree Title	

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program				15	
Required credit hours offered by the unit	Minimum			12	
	Maximum			15	
Required credit hours offered outside of the unit	Minimum			0	
	Maximum			3	
Required prerequisite credit hours not included above	Minimum			0	
	Maximum			0	

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals •

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

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Attachments

- Chair Letter - minors.pdf
(Letter from Program-offering Unit. Owner: Zerby, Henry Nevin)
- FST Concur.doc
(Support/Concurrence Letters. Owner: Zerby, Henry Nevin)
- CoverletterMinor.doc: College Coverletter
(Letter from the College to OAA. Owner: Pfister, Jill Ann)
- Dairy Science Revised ASC Advising Sheet.doc
(Semester Advising Sheet(s). Owner: Zerby, Henry Nevin)
- Dairy Science Revised ASC Advising Sheet 3-14-13.doc: Revised ASC advising sheet
(Semester Advising Sheet(s). Owner: Vankeerbergen, Bernadette Chantal)
- Dairy Science Minor logo-3-15.docx
(Semester Advising Sheet(s). Owner: Zerby, Henry Nevin)
- Dairy Science Minor Rationale-3-15.docx
(Program Proposal. Owner: Zerby, Henry Nevin)

Comments

- 3-15-13: Sent back for revisions to course titles (see e-mail to H. Zerby). *(by Vankeerbergen, Bernadette Chantal on 03/15/2013 01:49 PM)*
- I have incorporated the suggested changes from the ASCC Natural and Mathematical Sciences Panel into the rationale and the semester advising sheets. *(by Zerby, Henry Nevin on 02/02/2013 12:42 PM)*
- Now that we have revised the minor sheets please be sure the one approved by the College is included. You will receive at COAA tomorrow. We also need rationale etc. *(by Pfister, Jill Ann on 11/27/2012 05:05 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Zerby, Henry Nevin	11/21/2012 06:33 AM	Submitted for Approval
Revision Requested	Pfister, Jill Ann	11/27/2012 05:05 PM	Unit Approval
Submitted	Zerby, Henry Nevin	11/28/2012 02:28 PM	Submitted for Approval
Revision Requested	Pfister, Jill Ann	11/28/2012 09:47 PM	Unit Approval
Submitted	Zerby, Henry Nevin	11/28/2012 09:53 PM	Submitted for Approval
Approved	Pfister, Jill Ann	11/29/2012 08:19 PM	Unit Approval
Approved	Pfister, Jill Ann	11/29/2012 08:27 PM	College Approval
Revision Requested	Vankeerbergen, Bernadette Chantal	01/22/2013 09:33 AM	ASCCAO Approval
Submitted	Zerby, Henry Nevin	02/02/2013 12:42 PM	Submitted for Approval
Approved	Pfister, Jill Ann	02/27/2013 09:02 PM	Unit Approval
Approved	Pfister, Jill Ann	02/27/2013 09:05 PM	College Approval
Revision Requested	Vankeerbergen, Bernadette Chantal	03/15/2013 01:50 PM	ASCCAO Approval
Submitted	Zerby, Henry Nevin	03/15/2013 03:28 PM	Submitted for Approval
Approved	Pfister, Jill Ann	03/16/2013 11:15 PM	Unit Approval
Approved	Pfister, Jill Ann	03/19/2013 08:42 PM	College Approval
Pending Approval	Hogle, Danielle Nicole Hanlin, Deborah Kay Nolen, Dawn Jenkins, Mary Ellen Bigler Vankeerbergen, Bernadette Chantal	03/19/2013 08:42 PM	ASCCAO Approval



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Phone 614-292-6891
FAX 614-292-1218

November 29, 2012

Randy Smith
Vice Provost
203 Bricker Hall
190 North Oval Mall
CAMPUS

Randy Smith:

The College of Food, Agricultural, and Environmental Sciences is pleased to submit two new minors: Dairy Science and Human and Animal Interactions. These minors have been submitted and approved by the department of Animal Sciences and approved unanimously by the College Committee on Academic Affairs on November 15, 2012. They are developed according to the College's guidelines for minors and we would like these minors available for use as soon as they are approved.

Thank you for your consideration.

Sincerely,

Jill A. Pfister

Jill A. Pfister
Assistant Dean, Academic Affairs
And College Secretary



Department of Animal Sciences

2029 Fyffe Court
Columbus, OH 43210

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Jill Pfister
Assistant Dean, Academic Affairs and College Secretary
College of Food, Agricultural, and Environmental Sciences

November 19, 2012

Dear Jill:

On behalf of the faculty of the Department of Animal Sciences, I am presenting two new minors for approval. The names of these minors are Dairy Science Minor and Human and Animal Interactions Minor. Both minors were initiated within the Department during the Q2S transition. However, it was decided at that time to delay their full development until time permitted. The faculty and the Academic Affairs Committee of the Department of Animal Sciences have approved both minors. Dairy Science is recognized as strength within the Department and is supported by several faculty members. The recent success of our OSU teams in the North American Intercollegiate Dairy Challenge Contest has brought desirable visibility to our program. During the past eight years, the Department has increased its focus on animal behavior, animal welfare, and human and animal interactions in its teaching, research, and extension programs. This is an area that has also received greater attention within the State of Ohio in recent years at various levels. To further support this discipline and to enhance the Department's capacity to respond to increased interest from students, stakeholders, and the community at large, we are in the process of filling an additional faculty position in this area. Letters of concurrence have been requested and granted from the Department of Food Science & Technology and from The School of Environment & Natural Resources for the Dairy Science Minor and the Human and Animal Interactions Minor, respectively.

Thank you for your consideration of these two new minors. If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Ronald S. Kensinger".

Ronald S. Kensinger
Chair and Professor
Department of Animal Sciences

DAIRY SCIENCE MINOR

Rationale

The Dairy Science Minor was developed to provide students who are enrolled in programs outside of the Department of Animal Sciences an opportunity to gain additional knowledge and experience with the Dairy Industry. Several students pursuing majors in communication, agricultural systems, marketing, and business have expressed interest in a minor that provides a background in the dairy industry to aid them in pursuing employment within their respective field as it relates to the dairy industry or its allied partners. The courses have been structured to ensure an adequate base of knowledge about dairy science, as well as an opportunity to specialize within a discipline of the student's choice (i.e., nutrition, genetics, physiology, grazing and management, or dairy products).

Resources, advising and administration, additional expenses

Faculty and staff of the Department of Animal Sciences who routinely advise several of our majors who are also pursuing a career in the dairy industry or dairy related industries will conduct advising and administration for this minor. Thus, they are very familiar with the courses available in the minor and their respective prerequisites and semesters of offering. We anticipate five to ten students enrolling in the minor in its first year and approximately 15 – 20 students enrolling in the minor in subsequent years.

The minor will not require additional resources or expenses, as the classes involved in the minor are also courses that currently serve students in the animal science curriculum.

Program Learning Goals

1. Learn about the scope of the dairy industry and its economic value to society.
2. Learn about the biological principles involved in the growth and milk production of dairy animals.
3. Appreciate the breadth of knowledge used to solve problems and integrate solutions in a profitable dairy enterprise.

Program Learning Outcomes

After completing the Dairy Science Minor, students should be able to:

- Describe or provide an overview of the production systems associated with the dairy industry,
- Explain the nutritional needs and physiological focuses (digestive system, reproductive system, mammary system, etc.) of dairy animals,
- Have an awareness of health related challenges at multiple stages of the life and lactation cycles of dairy animals, and

- Integrate the discipline of their major into career opportunities within the dairy industry.

Assessment

Direct Measures - Review of feedback and assessment from classes in the minor

- Embedded short answer examination questions,
- Regular in-class short writing assignments associated with lectures,
- Participation in guided discussion and scenarios (e.g., ethics and moral reasoning) via analysis/discussion/presentation in small groups during recitation sessions,
- Rubrics used in grading written assignments will have sub-scores addressing these learning objectives, and
- Tracking of employment to determine number of students with careers in the dairy industry.

Indirect Measures – Review Graduating Senior Evaluation and Feedback

- Student survey and
- Student evaluation of instruction.

Assessment data will be used to:

- Analyze and discuss trends with the unit's faculty,
- Analyze and report to the College,
- Make improvements in curricular requirements (e.g., add, subtract courses),
- Make improvements in course delivery and learning activities within courses, and
- Make improvements in learning facilities, laboratories, and/or equipment.

List of Courses

List of Courses	Credit Hours	Offering
ANIMSCI 2200.01 Introductory Animal Sciences	3	AU & SP
ANIMSCI 2400.07 Global Dairy Industries	1	SP
ANIMSCI 2507 Challenges and Opportunities for the Dairy Industry1	SP	
ANIMSCI 3130 Principles of Animal Nutrition	3	AU & SP
ANIMSCI 3140 Principles of Animal Systems Physiology	3	AU & SP
ANIMSCI 3147 Milk Secretion	2	SP
ANIMSCI 3150 Principles of Genetic Improvement	3	AU & SP
ANIMSCI 3160 Reproductive Physiology	3	AU & SP
ANIMSCI 3170 Animal Health I	2	AU & SP
ANIMSCI 3307 Dairy Cattle Selection and Evaluation	2	SP
ANIMSCI 3400 Management Intensive Grazing	2	AU
ANIMSCI 3797.07 Dairy Industry Outside the U.S.	2	SP
ANIMSCI 4007 Dairy Herd Management	3	AU
FDSCTE 5420 Dairy Processing	3	SP

The Ohio State University
College of Arts and Sciences

Dairy Sciences Minor

Dr. Maurice Eastridge, Coordinating Adviser
221B Animal Science Building
2029 Fyffe Road
614-688-3059
Eastridge.1@osu.edu

The minor in Dairy Science is organized to provide students with an understanding of the scope of the dairy industry and the flexibility to develop an additional focus within a specific discipline within the dairy industry (i.e. nutrition, physiology, genetics, reproduction, or health).

The minor in Dairy Science consists of 15 credits of course work in dairy related courses. Some of the courses listed below may have prerequisites. Students will complete nine required credit hours (four courses) and then select six additional credit hours from a list of elective courses within the minor.

After the minor coordinating adviser in the Department of Animal Sciences has approved the Minor Program Form (listed above), you should file the form with your college or school counselor. For further information about the minor program, contact the department.

Required Courses: 9 hours

ANIMSCI 2200.01 (3), 2507 (1), 3147 (2), 4007 (3)

Elective Courses: 6 hours

ANIMSCI 2400.07 (1), 3130 (3), 3140 (3), 3150 (3), 3160 (3), 3170 (2), 3307 (2), 3400 (2), 3797.07 (2),

FDSCTE 5420 (3)

Collectively, the required courses and elective courses must total a minimum of 15 semester hours. At least 6 of the 15 credit hours must be at the 3000 level or above. The Dairy Science minor is not available to students majoring in Animal Sciences through the B.S. in Agriculture or B.S. in Nutrition.

Dairy Science minor program guidelines

Required for graduation No

Credit hours required A minimum of 15 credit hrs.

Transfer credit hours allowed No more than one half of the credit hours required on the minor.

Overlap with the GE Permitted (maximum of one course may overlap between the minor and the GE).

Overlap with the major Not allowed and

- The minor must be in a different subject than the major.
- The same courses cannot count on the minor and on the major.

Overlap between minors Each minor completed must contain 12 unique hours.

Grades required

- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative point-hour ratio required for the minor.
- Course work graded Pass/Non-Pass cannot count on the minor.

Minor Approval The minor program description sheet must be approved by the minor coordinating adviser.

Filing the minor program form The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the minor Once the minor program is filed in the college office, any changes must be approved by the academic unit offering the minor.



Food Science & Technology

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2015 Fyffe
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Phone (614) 292-7769
E-mail mangino.2.osu.edu

Henry Zerby
Department of Animal Sciences

Henry

The Department of Food Science and Technology is supportive of the Dairy Science minor. The inclusion of our dairy processing course as an elective is appropriate.

Sincerely

A handwritten signature in black ink that reads "Mike Mangino".

Mike Mangino
Professor
Department of Food Science & Technology



Department of Molecular Genetics

College of Arts and Sciences
482 West 12th Avenue
Columbus, OH 43210-1292

Phone: (614) 292-3594
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April 4, 2013

To
Dr. William Masters
Chair, Arts and Sciences Curriculum Committee

Dear Mitch,

The NMS Panel of the ASCC forwards two minors out of the College of Food, Agriculture, and Environmental Sciences for approval through the ASCC. Both minors have been discussed at the NMS Panel meeting on January 15, 2013.

1. Dairy Science Minor

This minor will provide students outside the Department of Animal Sciences with an opportunity to gain additional knowledge and experience with the Dairy Industry. A combination of required and elective courses utilized in the Dairy Science Minor, are structured to ensure an adequate knowledge base about dairy sciences, as well as the opportunity to specialize within an area of choice such as nutrition, genetics, physiology, grazing and management, or dairy products.

During NMS Panel discussion of the Dairy Science Minor the a number of minor issues where raised. These include:

Language of the Learning Goals,
incorrect or incomplete course titles, and
various suggested language changes to the ASC minor advising sheet.

The NMS Panel unanimously voted to recommend approval of the Dairy Science Minor with contingencies, to be verified by the NMS Panel chair. After verification that the requested changes have been made, the proposal is hereby submitted to ASCC for approval.

2. Human and Animal Interactions Minor

A comprehensive collection of courses has been developed by the Department of Animal

Sciences that allow students to focus on the past, present and future of interactions between humans and animals, so that they may gain a broader understanding in the benefits and importance of human and animal interactions.

During NMS Panel discussion of the Dairy Science Minor the a number of minor issues where raised. These include:

Clarification/correction of hours listed for "Required credit hours outside the department" ,
language of the Learning Goals, and
language changes/clarifications to the ASC minor advising sheet.

The NMS Panel unanimously voted to recommend approval of the Dairy Science Minor with contingencies, to be verified by the NMS Panel chair. After verification that the requested changes have been made, the proposal is hereby submitted to ASCC for approval.

Sincerely,

A handwritten signature in black ink, appearing to read 'Harald Vaessin', with a long horizontal flourish extending to the right.

Dr. Harald Vaessin
Professor
Chair, NMS Panel, ASCC
Department of Molecular Genetics