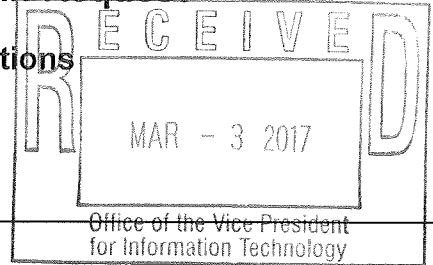


#1703

NDSU Student Technology Fee Action Plan Request

I. Action Plan Introduction and Authorizations



NDSU ORGANIZATION OR UNIT Department of Animal Sciences Meat Lab			
TITLE OF PROJECT Visual aid equipment for the focus of meat production and safety training for beef, pork, and lamb at the NDSU Meat Lab, Farm to Table Initiative.			
Project Duration (3 years maximum)	From: March 2017	To: September 2017	
Type of Project (Check one)	New <input checked="" type="checkbox"/>	Previously Submitted	Renewal
Total Technology Fee Request \$5795.00 \$5,500			
Project Director (Must be NDSU faculty or staff)	Campus Address: Department of Animal Sciences Dept. 7630 Phone: 701-231-7641 Fax: 701-231-7590 E-mail: eric.p.berg@ndsu.edu		
Name (Type or Print)	Signature	Date	
Project Director Dr. Eric Berg, Associate Head of ANSC		3-3-2017	
Unit Head Dr. Greg Lardy, Department Head		3/3/17	
IT Division Consultant	Signature	Date	
Melissa Stotz		3/3/17	

* technology not supported by ITS.
Executive Summary (maximum of 175 words)

The recent concerns of consumers for the safety of the food they are purchasing and eating has become an issue especially for the meat animal industry. Currently NDSU Animal Science- Meat Science lab has limited technological equipment and software to perform research and teach students efficiently on Hazzard Analysis and Critical Control Points of meat production and the Food Knowledge Movement. As of now the NDSU meats lab staff and faculty have limited access to software and equipment to perform lessons from the standpoint of the ethical and safety process of the meat we produce for consumers. Currently, we have no up to date technology to gauge food safety, farm to table initiative, innovative presentation equipment, and lab equipment for students to perform research. This project will provide a major benefit to Animal Science students who are performing research on meat animal industries in the aspect of from farm to table and the further processed meats in terms of modern technology equipment availability.

demetris.reedjr@ndsu.edu

The Technology Fee Advisory Committee will only accept for consideration Student Technology Fee Action Plan Request forms which are fully completed and signed, and whose Project Directors have no past due reports on previously awarded projects as of the current submission deadline date, according to the guidelines listed in the Instructions, pages 1 and 2.

Technology Action Plan Request forms will be opened and reviewed after the submission deadline.

NDSU Student Technology Fee Action Plan Request

II. Project Overview

1. How does this project meet student needs?

Currently, ANSC students have limited access to modern equipment and software for meat science courses required by industry for employment. This project would allow students to complete coursework and understanding of meat science and food science on campus while in class, instead of having to spend extra funding to travel to learn, which is standard capability at our peer institutions.

2. What audience does this project directly serve? What audience is indirectly served? How many students are affected?

This project would allow access to the coursework, research, and training to all 500+ ANSC and Agriculture students. Animal Science faculty would also be able to utilize the proposed coursework and training materials improvements in education of food safety and production.

3. For projects that target a subset of NDSU's students, please describe the possibility for broader application in the future.

This project would not only serve those who major in animal sciences but all students on the campus of NDSU. It is a vital to have this equipment and supporting software at a research university, especially when all students, faculty, and staff at some point in the day must eat what we in Agriculture produce. The Animal Sciences Department would be willing to share the results with others to improve food productivity and safety.

4. Describe both the immediate and long term impact of this project.

The software and coursework of student would be implemented immediately and expected completion of the training during the fall and spring semester classes. This would also showcase NDSU as innovating in training all its students in production safety from an array of agriculture backgrounds to those with absolutely no background in agriculture. Long term, this will student retention, graduation rate, and employment after graduation will increase.

5. Who will pay for ongoing expenses following the technology fee funded portion of this project (e.g., who will replace hardware or software after it has reached its end of life)?

The ANSC department will maintain the coursework and software after initial deployment, utilizing the funds allocated from research grants.

6. Describe how this project will follow NDSU's best practices in information technology. (Please make sure the NDSU IT Division staff you consulted signs in Part I of this form.)

The project will utilize authentication software for the security of the university system.

7. What service on campus is most similar to the one proposed here? How does this project differ?

There is currently an out dated system on campus that is used for ANSC students to obtain the education and training for HACCP, and farm to table food safety.

NDSU Student Technology Fee Action Plan Request

III. Project Description (5 pages maximum)

Include information on the background of this project: how did it come to fruition?

The NDSU Meat lab has made efforts in acquiring technology that will expand student and faculty access to new techniques in food and meat production. We recently purchased a new projector for the classroom in 2015. This investment has reduce the gap that limits our instructors to develop presentations and hold training and seminars in the Sheppard classroom.

By improving additional access to technological instruments, the meat lab can create new live demonstrations, media uploads for students to download and scientific based techniques. The technology would also be used by students who are in hands-on courses to present their different procedures in food production for conferences that hold processed foods competitions.

These technologies would benefit our animal science courses, the meat lab, and research in food and meat processing. The need for modern technology would improve the campus and community awareness of the impact NDSU students and faculty have on the industry of Agriculture. This idea came to fruition after a faculty member and numerous students suggested to our managers and fellow students that added technology could increase interest in the program. They also said it would be more inviting for guest speakers and provide ease to disseminate information.

NDSU Student Technology Fee Action Plan Request

IV. Milestones

List the date for each project milestone. These milestones should represent the *significant* accomplishments that will be associated with the action plan. For each milestone, please indicate its expected outcome and the means for assessing that outcome. (The table may be extended as needed.)

	<u>Date</u>	<u>Milestone</u>	<u>Expected Outcomes</u>	<u>Means of Assessment</u>
1.	March 2017	Equipment ordered and received	Equipment received	Inventory Checklist and Logging
2.	April 2017	Equipment Installed	Equipment Installed	Testing of equipment
3.	May 2017	Use of equipment for summer seminars and conference	Projection and improvements effects to students and community	Faculty assessment of the improvements
4.	August 2017	Use of equipment for Fall 2017 classes (5 courses)	Better presentation capabilities	Faculty assessment of the technology improvements on coursework
5.				

NDSU Student Technology Fee Action Plan Request

V. Supporting Documentation

NDSU Student Technology Fee Action Plan Request VI. Budget

(double-click on the form to begin entering data)

1.	NDSU ORGANIZATION OR UNIT Animal Science Department Meat Lab
2.	PROJECT DIRECTOR(S) (Must be NDSU faculty or staff) Dr. Eric Berg

3.	SALARIES AND WAGES		
	Personnel description	Number employed	Number of months
	A. Staff		
	B. Graduate students		
	C. Undergraduate students		
4.	TOTAL SALARIES AND WAGES		\$0.00
5.	FRINGE BENEFITS		\$0.00
6.	TOTAL SALARY, WAGES AND BENEFITS		\$0.00

7.	EQUIPMENT	\$0.00
	Laptop/ protection covering (equipped protection for cold)	\$700.00
	2 Processing floor screen (SunBriteTV veranda Series withstand -24 °F)	\$2,610.00
	Dual Camera and Recorder	1600.00
	Wall mounts for screens (2 at \$45 each)	90.00
	Installation of outlets and wall mounts (2 at \$250)	500.00

8.	MATERIALS AND SUPPLIES	\$0.00
	Describe Materials and Supplies specifics in the Budget Justification section	

9.	TOTAL TECHNOLOGY FEE REQUEST	\$5,500.00
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10.	MATCH (Describe in Match Section)	\$0.00
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11.	TOTAL PROJECT EXPENDITURE	\$5,500.00
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NDSU Student Technology Fee Action Plan Request

VII. Budget Justification

Describe how you arrived at the budget totals in Section VI, Budget.

You are expected to follow all applicable university policies and procedures regarding salary expenditures.

You are expected to follow the state-approved purchasing guidelines when purchasing materials and supplies.

- Equipment: List name, estimated cost and quantity of each item and explain why it is important to the project. Include installation and maintenance costs in your estimates.
- Materials and Supplies: List name, estimated cost and quantity for each non-equipment items and explain why it is important to the project.

The total requested project cost for this project is \$5,500. This expenditure includes the purchase of one laptop to link the processing floor screens, the processing floor screens for presentations during class, seminars, and demonstrations, the camera/recorder for recording the classes and demonstrations, and the mounts with installation to support the screens and supply power.

The camera/ recorder have been previously borrowed from extension and subject to being returned or classified unavailable at the owner's request. The purchase of the camera/ recorder would help to document our class session, seminars, and demonstrations. The screens are essential as we have to share a classroom or move from one room to another before we can teach certain coursework, we have tried projectors but they freeze easily. The screens can acclimate to the 30°F- 24°F floor and don't freeze during presentations.

NDSU Student Technology Fee Action Plan Request

VIII. Budget Match

1. Attempted Budget Matches:

2. Actual Budget Matches:

3. Additional Budget Match information: