SOUTH DAKOTA BOARD OF REGENTS

there are approximately 150,000 cows in the state and this number is expected to grow to 200,000 in the next 3-4 years. Operations that manage these herds are in need of qualified, knowledgeable personnel. While there is concerted effort to increase enrollment in the majors, there also are students at SDSU who are majoring in other areas, that are not interested in double majoring but have opportunities for employment in the dairy industry. This minor will provide such students the credentials needed to fill needs within the industry. Students in other majors that will enroll in this minor will offer dairy employers additional credentials through their majors.

The Dairy Industry Minor will contribute to the attainment of the Imagine 2023¹ strategic plan Strategic Goal 1 – Excellence through Transformative Education. The minor will utilize active and innovative teaching and learning practices and incorporates multiple cross-curricular skills, including inquiry and analysis, critical thinking, teamwork and problem-solving. Hands-on opportunities through the Dairy Research and Training Facility (dairy farm) and the Davis Dairy Plant will be available to students giving them strong skills for employment.

SDSU does not request new state resources.

3. What is the nature/purpose of the proposed minor? Please include a brief (1-2 sentence) description of the academic field in this program.

Dairy science is an application of the sciences, engineering and technology, and business for the study of milk production and processing. Dairy science students may choose a major in Dairy Production, Dairy Manufacturing, or both. Dairy Production is the study of production of milk, management of the farm, feeding, breeding and herd health. Dairy Manufacturing is the study of processing and merchandising of milk and milk products. The purpose of this minor is for students majoring in programs other than Dairy Production or Dairy Manufacturing to develop a limited knowledge and competency in the dairy industry.

The proposed minor will allow students to become credentialed in several of the basic aspects of the dairy industry. This will enable employment opportunities in a growing industry. SDSU is unique nationwide in that it offers programs that cover the dairy industry from the farm to product. Students that enroll in this minor will have the opportunity to develop credentials in both the farm and product aspect and thereby enhance their employment opportunities.

4. How will the proposed minor benefit students?

The dairy industry in South Dakota is growing at an exponential rate and there is a strong demand for students with knowledge of the field. The nature of the current industry is such that in addition to a strong demand for graduates with majors in dairy science, there also is a need for those that may specialize in other programs such as Animal Science, Agricultural Business, Agricultural & Biosystems Engineering with knowledge of the dairy profession. The new minor is designed to offer courses in both dairy production and dairy manufacturing.

¹ <u>https://www.sdstate.edu/imagine-2023-aspire-discover-achieve</u>

story for dairy" (McDonald, 2019)⁵. The South Dakota dairy industry has grown from approximately 80,000 cows in 2002 to approximately 150,000 today. It is anticipated that it will reach 200,000 cows in the next 3 to 4 years. Trained professionals will be needed to serve this industry. Having a growing dairy industry in South Dakota helps set the stage for the success of a Dairy Industry minor.

6. Provide estimated enrollments and completions in the table below and explain the methodology used in developing the estimates.

		Fiscal Years*				
	1 st	2 nd	3 rd	4 th		
Estimates	FY 22	FY 23	FY 24	FY 25		
Students enrolled in the minor (fall)	5	10	15	20		
Completions by graduates		5	10	15		

*Do not include current fiscal year.

Estimates are based on student enrollment in the Food Safety Minor that is housed in the Dairy and Food Science Department, advisor recommendations, and expr[)]TJE1 0 0 1 38es

			Prerequisites for	Credit	New	
Prefix	Number	Course Title	Course	Hours	(yes, no)	
DS	494					