



**SOUTH DAKOTA BOARD OF REGENTS  
ACADEMIC AFFAIRS FORMS**

**New Course Request**

<b>SDSU</b>	<b>Education &amp; Human Sciences / Health &amp; Nutritional Sciences</b>
<b>Institution</b>	<b>Division/Department</b>
Dennis D. Hedge	5/16/2018
<b>Institutional Approval Signature</b>	<b>Date</b>

**Section 1. Course Title and Description**

Prefix & No.	Course Title	Credits
NUTR 426-526	Production of Wine Beer Spirits	3
NUTR 426L-526L	Production of Wine Beer Spirits Laboratory	0

<b>NUTR 426-526 Course Description</b>
Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits.

<b>NUTR 426L-526L Course Description</b>
Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer.

**Pre-requisites or Co-requisites**

Prefix & No.	Course Title	Pre-Req/Co-Req?
NUTR 426L-426/526L-526		Co-req

**Registration Restrictions**

Participants must be 21 years of age or older to enroll.
--

**Section 2. Review of Course**

- 2.1. Was the course first offered as an experimental course?  
 Yes (if yes, provide the course information below)  No
- 2.2. Will this be a unique or common course?

**Unique Course**

Prefix & No.	Course Title	Credits
BIOL 283-283L	Biology of Beer and Lab	4

<b>Prefix &amp; No.</b>	<b>Course Title</b>	<b>Credits</b>
FS 351-351L	Principles of Food Processing and Lab	3
CBE 410-410L	Brewing Science and Engineering and Lab	3, 1
HMG 480	Introduction to Wine, Beer and Spirits	3

*Provide explanation of differences between proposed course and existing system catalog courses below:*

BIOL 283-283L (NSU) focuses on the biological/microbiological components of beer making and does not provide wine and beer taste testing protocol.

CBE 410-410L (SDSMT) primarily focuses on the engineering aspects of brewing and fermentation. CBE 410 does include limited investigation of the ingredients used to produce beer and wine, the biology associated with fermentation and laboratory methods and quality control.

FS 351-351L (SDSU) focuses on basic principles of food processing. Fermentation is covered briefly and in general terms.

HMG 480 (SDSU) focuses on the management of beverage service.

NUTR 426-426L/526-526L will investigate the entire process of wine, beer and spirits production. It will include the agricultural aspects of grapevine care and the unique contributions each grape varietal can provide as well as the unique functional contribution from individual beer ingredients. The proposed course focuses on a hands-on production based experience that emphasizes the biological processes of brewing and vinting and provide an in-depth look at these processes as they relate to the production of wine, the brewing of beer, and the distillation of spirits. This course will also provide exhaustive training in industry driven wine and beer taste testing protocol.

### **Section 3. Other Course Information**

#### **3.1. Are there instructional staffing impacts?**

No. Schedule Management, explain below: This course will be taught by existing faculty. The course will fit into the instructor's workload. This course will be offered every spring.

#### **3.2. Existing program(s) in which course will be offered:** Nutrition and Dietetics (B.S.), Nutrition & Exercise Sciences (M.S.) – Nutritional Sciences Specialization

#### **3.3. Proposed instructional method by university:** 426-526: R-Lecture; 426L-526L - Laboratory

#### **3.4. Proposed delivery method by university:** 001- Face-to-face instruction

#### **3.5. Term change will be effective:** Spring 2019

#### **3.6. Can students repeat the course for additional credit?**

Yes, total credit limit:  No

#### **3.7. Will grade for this course be limited to S/U (pass/fail)?**

Yes  No

#### **3.8. Will section enrollment be capped?**

Yes, max per section: 20  No

#### **3.9. Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the [Course Inventory Report](#)?**

Yes  No

#### **3.10. Is this prefix approved for your university?**

Yes  No

**Section 4. Department and Course Codes (Completed by University Academic Affairs)**

4.1. University Department Code: SHNS

4.2. Proposed **CIP Code**: 01.1001

Is this a new CIP code for the university?  Yes  No

**NEW COURSE REQUEST  
Supporting Justification for On-Campus Review**

<u>Kendra Kattelmann</u> <b>Request Originator</b>	<u>Kendra Kattelmann</u> <b>Signature</b>	<u>12/5/2017</u> <b>Date</b>
<u>Kendra Kattelmann</u> <b>Department Chair</b>	<u>Kendra Kattelmann</u> <b>Signature</b>	<u>12/5/2017</u> <b>Date</b>
<u>Jane Hegland</u> <b>School/College Dean</b>	<u>Jane Hegland</u> <b>Signature</b>	<u>1/29/2018</u> <b>Date</b>

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

The US wine and beer industries provide major economic contributions to the US economy. The SD wine and brewing industries while still in their infancy, are growing steadily and poised to make great contributions in the future. In 2011, SD had five craft breweries growing to 15 in 2016. South Dakota's wine industry is also growing. In 1975, SD had no wineries, growing to 22 wineries in 2015. It has been brought to the department's attention by an industry leader that there is a need to provide coursework in wine/beer production along with business practices in the wine/beer production industry. NUTR 426-426/526-526L is designed to complement HMG 480 by investigating the processes involved in the production of wine, beer and spirits. Future industry employees and prospective entrepreneurs in the wine and beer industry will benefit from the new course as it provides instruction in the processes of wine fermentation, beer brewing and the distillation of spirits. Topics of study include rigorous preparation for real world applications related to the fermentation and brewing processes, quality control testing per industry standards, methodology to tweak wine and beer flavor/identify defects and exhaustive training in taste-testing procedures per rigorous industry standards. These skills are valuable assets for the growing wine and beer industry especially when combined with a food and business related coursework. Enrollment will be limited to those who are 21 years of age or older.

2. Note whether this course is:  Required  Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

All majors may take this course as an elective.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

Graduate students will prepare a review paper on course subject matter.

5. Desired section size 20

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).

Mary Gengler, Instructor, MS

Anne Fennell, Professor, PhD

7. Note whether adequate facilities are available and list any special equipment needed for the course.  
Existing facilities are adequate for this course. We are in the process of renovating Wagner 436 from a chemical food science lab to an experimental foods/brewing lab. This space will be utilized for other foods courses as well as the brewing class.
8. Note whether adequate library and media support are available for the course.  
Adequate library and media support are available for this course.
9. Will the new course duplicate courses currently being offered on this campus?  
 Yes     No
10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.  
N/A