Program Change Request

New Program Proposal

Date Submitted: 10/04/18 10:50 am

Viewing: CERT-FDIV : Food Diversity - Certificate

Last edit: 11/08/18 8:09 pm

Changes proposed by: poppycapehart

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poppy Capehart</td>
<td><a href="mailto:poppy@tamu.edu">poppy@tamu.edu</a></td>
<td>979-845-2142</td>
</tr>
</tbody>
</table>

Academic level: Undergraduate
Effective Term: 2019-2020
Department: Nutrition & Food Science
College: Agriculture & Life Sciences
Program type: Certificate
Associated Program: Not Applicable
With a certificate in: Food Diversity

Catalog Program Title
Food Diversity - Certificate

CIP and Fund code: 011002

Rationale for Proposal
Food processors must be prepared for the diversity of foods they can potentially manufacture. While many require special certifications that add to the diversity of food products, all manufactured foods require adequate documentation of the safety and quality of its supply chain. Students completing a Food Diversity Certificate will be uniquely prepared for the challenges of a diverse food supply.

Program hours: 15
Is this program eligible for financial aid? No
Certificate type: Stand-alone
Program delivery mode: On-campus

Catalog Program Requirements

In Workflow
1. NFSC Department Head Review
2. Curricular Services Review
3. AG Committee Preparer UG
4. AG Committee Chair UG
5. AG College Dean UG
6. Provost
7. UCC Preparer
8. UCC Chair
9. Faculty Senate Preparer
10. Faculty Senate
11. Provost II
12. President
13. Curricular Services

Approval Path
1. 09/04/18 1:53 pm Stephen Talcott (stalco): Approved for NFSC Department Head Review
2. 09/05/18 6:06 pm Angel Mario Carrizales (carri1214): Rollback to Initiator
3. 09/27/18 2:06 pm Stephen Talcott (stalco): Approved for NFSC Department Head Review
4. 10/04/18 10:04 am Angel Mario Carrizales (carri1214): Rollback to Initiator
5. 10/04/18 11:21 am Stephen Talcott (stalco): Approved for NFSC Department Head Review
6. 10/08/18 9:53 am Angel Mario Carrizales (carri1214): Approved for Curricular Services Review
7. 10/08/18 9:56 am Dawn Kerstetter (dkerstetter): Approved for AG Committee Preparer UG
8. 11/02/18 11:42 am Bob Knight (bob-knight): Approved for AG Committee Chair UG
9. 11/02/18 12:45 pm Dawn Kerstetter (dkerstetter): Approved for AG College Dean UG
The Food Diversity Certificate, offered by the Department of Nutrition and Food Science, contains 15 hours of concentrated study in the areas of religious and ethnic foods as related to food processing, quality control, record keeping, and global certifications for foods and food ingredients. The curriculum will provide a strong knowledge base to students who desire to work in the food ingredient or food manufacturing field with an emphasis on the diverse array of certifications that may be required such as Halal, Kosher, organic, non-GMO, or gluten-free or quality certifications such as Safe Quality Foods and Global Food Safety Initiative. The educational objectives for the Certificate in Food Diversity are:

Students will be able to explain the role of food diversity certifications in the food industry

Students will be able to process foods under a global food certificate program

Students will be able to provide traceability and auditing under a food diversity program

Students will be able to follow legal rules and regulations as well as religious and ethnic rules concerning food ingredients, production, and distribution

### Course List

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFSC 300</td>
<td>Religious and Ethnic Foods</td>
<td>3</td>
</tr>
<tr>
<td>NFSC 307/ANSC 307</td>
<td>Meats</td>
<td>3</td>
</tr>
<tr>
<td>NFSC 324</td>
<td>Food Safety and Preventive Controls for Human Food</td>
<td>3</td>
</tr>
<tr>
<td>NFSC 470/ANSC 470</td>
<td>Quality Assurance for the Food Industry</td>
<td>3</td>
</tr>
<tr>
<td>NFSC 485</td>
<td>Directed Studies</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Semester Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Additional Information

The Food Diversity Certificate, offered by the Department of Nutrition and Food Science, contains 15 hours of concentrated study in the areas of religious and ethnic foods as related to food processing, quality control, record keeping, and global certifications for foods and food ingredients. The curriculum will provide a strong knowledge base to students who desire to work in the food ingredient or food manufacturing field with an emphasis on the diverse array of certifications that may be required such as Halal, Kosher, organic, non-GMO, or gluten-free or quality certifications such as Safe Quality Foods and Global Food Safety Initiative. The educational objectives for the Certificate in Food Diversity are:

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### Required Proposal Forms


### Reviewer Comments

Angel Mario Carrizales (carri1214) (04/20/18 2:43 pm): Rollback: Please add a course list table to the "Catalog Program Requirements" area of the form. Also, the attached "New Program Request Form for Certificate Programs" list FALL 2018 as the implementation date. Note: Fall 2018 deadlines have passed.

Angel Mario Carrizales (carri1214) (09/05/18 6:06 pm): Rollback: Previous comments have not been addressed.

Angel Mario Carrizales (carri1214) (10/04/18 9:54 am): The program narrative text has been moved from the catalog program requirements to the additional information field.

Angel Mario Carrizales (carri1214) (10/04/18 10:04 am): Rollback: The CIP code listed on the CARS form does not match the Proposed CIP Code on the attached "New Program Request for Certificate Programs" form. Which is the intended code for this program?

Angel Mario Carrizales (carri1214) (10/08/18 9:53 am): Initial concerns addressed.

Angel Mario Carrizales (carri1214) (10/08/18 12:16 pm): Workflow adjusted to remove External Approval Role, program hours do not exceed the external reporting threshold.

Mike Stephenson (mstephenson) (11/02/18 4:26 pm): A separate assessment plan for this certificate is required by SACSCOC. Please discuss with Institutional effectiveness & evaluation for details and to get this in place prior to launching. Thanks.

Mike Stephenson (mstephenson) (11/02/18 4:26 pm): A separate assessment plan for this certificate is required by SACSCOC. Please discuss with Institutional effectiveness & evaluation for details and to get this in place prior to launching. Thanks.

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Terra Bissett (t.bissett) (12/10/18 10:26 am): UCC approved December 2018.
New Program Request Form for Certificate Programs

Directions: An institution shall use this form to propose a new bachelor’s or master’s degree program. In completing the form, the institution should refer to the document *Standards for Bachelor’s and Master’s Programs*, which prescribes specific requirements for new degree programs. Note: This form requires signatures of (1) the Chief Executive Officer, certifying adequacy of funding for the new program; (2) a member of the Board of Regents (or designee), certifying Board approval, and (3) if applicable, a member of the Board of Regents or (designee), certifying that criteria have been met for staff-level approval. NOTE: Preliminary authority is required for all engineering programs. An institution that does not have preliminary authority for a proposed engineering program shall submit a separate request for preliminary authority prior to submitting the degree program request form. That request shall address criteria set in Coordinating Board rules Section 5.24 (a).

**Administrative Information**

1. **Institution**: Texas A&M University

2. **Program Name** – Show how the program would appear on the Coordinating Board’s program inventory (e.g., *Bachelor of Business Administration degree with a major in Accounting*):

   Certificate in Food Diversity (transcripted)

3. **Proposed CIP Code**: 01.1002 (Food Technology and Processing)

4. **Brief Program Description** – Describe the program and the educational objectives:

   - Number of Semester Credit Hours Required: 15

   The Food Diversity Certificate, offered by the Department of Nutrition and Food Science, contains 15 hours of concentrated study in the areas of religious and ethnic foods as related to food processing, quality control, record keeping, and global certifications for foods and food ingredients. The curriculum will provide a strong knowledge base to students who desire to work in the food ingredient or food manufacturing field with an emphasis on the diverse array of certifications that may be required such as Halal, Kosher, organic, non-GMO, or gluten-free or quality certifications such as Safe Quality Foods and Global Food Safety Initiative. The educational objectives for the Certificate in Food Diversity are:

   - Students will be able to explain the role of food diversity certifications in the food industry
   - Students will be able to process foods under a global food certificate program
   - Students will be able to provide traceability and auditing under a food diversity program
   - Students will be able to follow legal rules and regulations as well as religious and ethnic rules concerning food ingredients, production, and distribution
5. **Administrative Unit** – Identify where the program would fit within the organizational structure of the university (e.g., *The Department of Electrical Engineering within the College of Engineering*):

The Department of Nutrition and Food Science within the College of Agriculture and Life Sciences

6. **Proposed Implementation Date** – Report the first semester and year that students would enter the program:

Fall 2019

7. **Contact Person** – Provide contact information for the person who can answer specific questions about the program:

   Name: Dr. Steve Talcott  
   Title: Professor and Associate Department Head  
   E-mail: stalcott@tamu.edu  
   Phone: 979-458-7964

### Program Information

**I. Need**

*Note: Complete I.A and I.B only if preliminary authority for the program was granted more than four years ago. This includes programs for which the institution was granted broad preliminary authority for the discipline.*

**A. Job Market Need** – Provide short- and long-term evidence of the need for graduates in the job market.

Food processors must be prepared for the diversity of foods they can potentially manufacture. While many require special certifications that add to the diversity of food products, all manufactured foods require adequate documentation of the safety and quality of its supply chain. According to the Islamic Food and Nutrition Counsel of America (IFANCA), as reported in Bloomberg News on September 14, 2016, sales of halal foods from restaurants and supermarkets are projected at $20 billion in 2016, a 33% growth from 2010. Likewise, the U.S. Kosher market serves over 12 million Americans who choose Kosher food products for health, food safety, taste, vegetarianism, lactose intolerance, and other dietary restrictions. Kosher foods generate $12 billion in annual sales and certifications exist for nearly 1,000,000 products in over 9,500 plants in more than 100 countries, according to the Orthodox Union, a leading kosher certifying agency. Students completing a Food Diversity Certificate will be uniquely prepared for the challenges of a diverse food supply.

**B. Student Demand** – Provide short- and long-term evidence of demand for the program.
Student demand is evidenced by the tremendous growth in our course NFSC 300-Religious and Ethnic Foods. The course enrolled 40 students in Spring 2012 and grew to 459 in Fall 2016 due to the awareness that food diversity has on our society and culture. NFSC 300 was the most populated on-line course in COALS in 2016.

C. Enrollment Projections – Use this table to show the estimated cumulative headcount and full-time student equivalent (FTSE) enrollment for the first five years of the program. (Include majors only and consider attrition and graduation.)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Fall 2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headcount</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>FTSE</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

II. Quality

A. Certificate and Degree Requirements – Use this table to show the certificate and degree requirements of the program. (Modify the table as needed; if necessary, replicate the table for more than one option.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Core Curriculum (bachelor’s degree only)</td>
<td>0</td>
</tr>
<tr>
<td>Required Courses</td>
<td>15</td>
</tr>
<tr>
<td>Prescribed Electives</td>
<td>0</td>
</tr>
<tr>
<td>Free Electives</td>
<td>0</td>
</tr>
<tr>
<td>Other (<em>Specify, e.g., internships, clinical work</em>) (if not included above)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>15</td>
</tr>
</tbody>
</table>

B. Curriculum – Use these tables to identify the required courses and prescribed electives of the program, and curriculum as it will appear in the undergraduate and graduate catalog. Note with an asterisk (*) courses that would be added if the program is approved. (Add and delete rows as needed. If applicable, replicate the tables for different tracks/options as shown in the undergraduate catalog.)
### Prefix and Number

<table>
<thead>
<tr>
<th>Prefix and Number</th>
<th>Required Courses</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFSC 300</td>
<td>Religious and Ethnic Foods (on-line)</td>
<td>3</td>
</tr>
<tr>
<td>NFSC/ANSC 307</td>
<td>Meats</td>
<td>3</td>
</tr>
<tr>
<td>NFSC 324</td>
<td>Introduction to Food Safety and Preventive Controls for Human Food</td>
<td>3</td>
</tr>
<tr>
<td>NFSC/ANSC 470</td>
<td>Quality Assurance for the Food Industry</td>
<td>3</td>
</tr>
<tr>
<td>NFSC 485</td>
<td>Directed Capstone Studies in Food Diversity</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Prefix and Number

<table>
<thead>
<tr>
<th>Prefix and Number</th>
<th>Prescribed Elective Courses</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTAL SCH 0**

### Course Descriptions

- **NFSC 300 Religious and Ethnic Foods**
  - Credits 3. 3 Lecture Hours.
  - Understanding religious and ethnic foods with application to product development, production, and nutritional practices; emphasis on different food rules and priorities with attention given to different religious and ethnic groups within the US and around the world.
  - Prerequisites: Junior or senior classification or approval of instructor; basic knowledge of food science and nutrition helpful.

- **NFSC 307/ANSC 307 Meats**
  - Credits 3. 2 Lecture Hours. 3 Lab Hours.
  - Integrated studies of the meat animal processing sequence regarding the production of meat-type animals and the science and technology of their conversion to human food.
  - Prerequisites: ANSC 107 and 108 or approval of department head.

- **NFSC 324. Introduction to Food Safety and Preventive Controls for Human Food**
  - Credits 3. 3 Lecture Hours.
  - This course will provide students with a basic understanding of the role of microorganisms in food spoilage, fermentation and safety. Microbiology of raw and processed human foods, and standard industry techniques of inspection and control will be discussed. Students will become a Preventive Controls Qualified Individual (PCQI) under the Food Safety Modernization Act (FSMA) regulations require that key food safety management activities must be completed by a PCQI who has successfully completed training in the development and application of risk-based preventive controls. This course follows the curriculum recognized by FDA, and successful completion will meet the requirements to be considered a...
PCQI and be qualified to assist the food industry in developing and applying risk-based preventive controls that meet FSMA requirements for implementation of a food safety system.

- **Prerequisite:** None.

- **NFSC 470 Quality Assurance for the Food Industry**

  - **Credits:** 3. 3Lecture Hours.
  - **Principles of food system process control including statistical process control (SPC) and the tools required to assure uniform communication and understanding of quality assurance systems.**
  - **Prerequisite:** Junior or senior classification.
  - **Cross Listing:** NFSC 470/ANSC 470.

- **NFSC 485 Directed Studies**

  - **Credits:** 0 to 4. 0 to 4 Other Hours.
  - **Directed study on selected problems in the area of food technology not covered in other courses.**
  - **Prerequisites:** Junior or senior classification; approval of department head; 2.0 GPR in major and overall.

C. **Faculty** – Use these tables to provide information about Core and Support faculty. Add an asterisk (*) before the name of the individual who will have direct administrative responsibilities for the program. *(Add and delete rows as needed.)*

<table>
<thead>
<tr>
<th>Name of Core Faculty and Faculty Rank</th>
<th>Highest Degree and Awarding Institution</th>
<th>Courses Assigned in Program</th>
<th>% Time Assigned To Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mian Riaz Instructor</td>
<td>Ph.D. in Food Science University of Maine</td>
<td>NFSC 300</td>
<td>Course is already offered</td>
</tr>
<tr>
<td>Jeff Savel Professor</td>
<td>Ph.D. in Animal Science Texas A&amp;M University</td>
<td>NFSC/ANSC 307</td>
<td>Course is already offered</td>
</tr>
<tr>
<td>Gary Acuff</td>
<td>Ph.D. in Food Science Texas A&amp;M University</td>
<td>NFSC 489</td>
<td>First offering Fall 2018</td>
</tr>
<tr>
<td>Wesley Osburn Professor</td>
<td>Ph.D. in Animal Science Texas A&amp;M University</td>
<td>NFSC/ANSC 470</td>
<td>Course is already offered</td>
</tr>
<tr>
<td>Open to faculty members of the Food Diversity Innovation Program</td>
<td>Ph.D. faculty</td>
<td>NFSC 485</td>
<td>Course is already offered</td>
</tr>
</tbody>
</table>

D. **Students** – Describe general recruitment efforts and admission requirements. How will students be accepted into the program? In accordance with the institution’s Uniform Recruitment and Retention Strategy, describe plans to recruit, retain, and students from underrepresented groups for the program.
The program is open to all students within Texas A&M University, but is expected to primarily serve students in the B.S. in Food Science and Technology, B.S. in Animal Science, B.S. in Poultry Science, B.S. in Nutrition, and a B.S. degree in Food Systems Industry Management. Enrollment in the program will occur at a student’s request through the NFSC advising office, and there are no restrictions to the student being enrolled other than a Junior/Senior classification and/or approval of the Department Head or Associate Department Head. The courses selected will have enhanced learning modules related to food diversity and religious and ethnic foods, and should be seen as an enhancement to their B.S. degrees while working in the food industry. The academic program will be enhanced from an endowment from the Islamic Food and Nutrition Counsel of America (IFANCA) that will aid in supporting the program and student retention. As a program rich in food culture and diversity, we feel the program will also attract under-represented student groups from both ethnic and religious minorities that will serve to enrich the program.

E. Library – Provide the library director’s assessment of library resources necessary for the program. Describe plans to build the library holdings to support the program.

No additional library resources are required for the certificate program.

F. Facilities and Equipment – Describe the availability and adequacy of facilities and equipment to support the program. Describe plans for facility and equipment improvements/additions.

Sufficient courses, instructors, and food processing facilities exist to support the Food Diversity certificate program. For NFSC/ANSC 307, our existing animal processing facilities exist in the Rosenthal meat processing center.

G. Accreditation – If the discipline has a national accrediting body, describe plans to obtain accreditation or provide a rationale for not pursuing accreditation.

None

H. Evaluation – Describe the evaluation process that will be used to assess the quality and effectiveness of the new degree program.

The Food Diversity Certificate program will be independently assessed by the standing Assessment Committee of the Department of Nutrition and Food Science. A rubric to measure program effectiveness will be created, based on our current rubrics for Critical Thinking, Teamwork, and Lifelong Learning.

I. Administration of Program – Describe how the program will be administered. Where will the program be administered (i.e., department, college)?
The program will be housed in the Texas A&M University Department of Nutrition and Food Science within the College of Agriculture and Life Sciences.

### III. Costs and Funding

#### Five-Year Costs and Funding Sources

No new state funding is required or requested for this program

<table>
<thead>
<tr>
<th>Five-Year Costs</th>
<th>Five-Year Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel$^1$</td>
<td>$0$</td>
</tr>
<tr>
<td>Facilities and Equipment</td>
<td>$0$</td>
</tr>
<tr>
<td>Supplies and Materials</td>
<td>$0$</td>
</tr>
<tr>
<td>Other$^2$</td>
<td>$0$</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>$0</strong></td>
</tr>
</tbody>
</table>

1. Report costs for new faculty hires, graduate assistants, and technical support personnel. For new faculty, prorate individual salaries as a percentage of the time assigned to the program. If existing faculty will contribute to program, include costs necessary to maintain existing programs (e.g., cost of adjunct to cover courses previously taught by faculty who would teach in new program).

2. Specify other costs here (e.g., administrative costs, travel).

3. Indicate formula funding for students new to the institution because of the program; formula funding should be included only for years three through five of the program and should reflect enrollment projections for years three through five.

4. Report other sources of funding here. In-hand grants, “likely” future grants, and designated tuition and fees can be included.
1. **Adequacy of Funding** – The chief executive officer shall sign the following statement:

   *I certify that the institution has adequate funds to cover the costs of the new program. Furthermore, the new program will not reduce the effectiveness or quality of existing programs at the institution.*

   __________________________________________
   Chief Executive Officer                        Date

2. **Board of Regents or Designee Approval** – A member of the Board of Regents or designee shall sign the following statement:

   *On behalf of the Board of Regents, I approve the program.*

   ________________________________
   Board of Regents (Designee)         Date of Approval

3. **Board of Regents Certification of Criteria for Commissioner of Assistant Commissioner Approval** – For a program to be approved by the Commissioner or the Assistant Commissioner for Academic Affairs and Research, the Board of Regents or designee must certify that the new program meets the eight criteria under TAC Section 5.50 (b): The criteria stipulate that the program shall:

   (1) be within the institution’s current Table of Programs;
   (2) have a curriculum, faculty, resources, support services, and other components of a degree program that are comparable to those of high quality programs in the same or similar disciplines at other institutions;
   (3) have sufficient clinical or in-service sites, if applicable, to support the program;
   (4) be consistent with the standards of the Commission of Colleges of the Southern Association of Colleges and Schools and, if applicable, with the standards or discipline-specific accrediting agencies and licensing agencies;
   (5) attract students on a long-term basis and produce graduates who would have opportunities for employment; or the program is appropriate for the development of a well-rounded array of basic baccalaureate degree programs at the institution;
   (6) not unnecessarily duplicate existing programs at other institutions;
   (7) not be dependent on future Special Item funding
   (8) have new five-year costs that would not exceed $2 million.

   *On behalf of the Board of Regents, I certify that the new program meets the criteria specified under TAC Section 5.50 (b).*

   ________________________________
   Board of Regents (Designee)         Date
September 6, 2018

Dr. Steve Talcott
Associate Head for Academic Programs
Department of Nutrition and Food Science

Re: Certificate in Food Diversity

The Department of Animal Science supports your use of NFSC/ANSC 307 (Meats) taught by Dr. Jeff Savell and NFSC/ANSC 470 (Quality Assurance for the Food Industry) taught by Dr. Wes Osburn as part of your undergraduate Certificate in Food Diversity. We will make all reasonable accommodations for these students with regard to course enrollment, curriculum needs, and pedagogy to enhance this new research and education program.

Sincerely,

Wesley Osburn, Ph.D.
Associate Department Head Academic Programs
Department of Animal Science
133 E Kleberg TAMU 2471
Texas A&M University
College Station, Texas, USA