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| For Academic Affairs and Research Use Only | |
| Proposal Number |  |
| CIP Code: |  |
| Degree Code: |  |

**NEW OR MODIFIED COURSE PROPOSAL FORM**

**[X] Undergraduate Curriculum Council**

**[ ] Graduate Council**

|  |
| --- |
| **[X]New Course, [ ]Experimental Course (1-time offering), or [ ]Modified Course (Check one box)** |

Signed paper copies of proposals submitted for consideration are no longer required. Please type approver name and enter date of approval.

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| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date… **Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **COPE Chair (if applicable)** |
| Julie B. King 8/7/2020 **Department Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Head of Unit (if applicable)** |
| |  |  | | --- | --- | | Mary Elizabeth Spence | 9/4/2020 | | **Office of Assessment** |  | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Undergraduate Curriculum Council Chair** |
| Shanon Brantley 08/26/2020 **College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Graduate Curriculum Committee Chair** |
| \_\_Susan Hanrahan\_\_\_\_\_\_\_\_ 8/27/2020 **College Dean** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Vice Chancellor for Academic Affairs** |
| |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **General Education Committee Chair (if applicable)** |  |

1. **Contact Person (Name, Email Address, Phone Number)**

Dr. Julie King, juking@astate.edu; 870-932-3920

1. **Proposed starting term and Bulletin year for new course or modification to take effect**

Fall 2021, Bulletin year 2021-2022.

**Instructions:**

*Please complete all sections unless otherwise noted. For course modifications, sections with a “Modification requested?” prompt need not be completed if the answer is “No.”*

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| --- | --- | --- |
|  | **Current (Course Modifications Only)** | **Proposed (New or Modified)**  *(Indicate “N/A” if no modification)* |
| **Prefix** |  | **OESH** |
| **Number\*** |  | **4203** |
| **Title** |  | **Principles of Food Safety and Sanitation**  **Short Title: Food Safety and Sanitation** |
| **Description\*\*** |  | Principles and techniques applied to the protection of food for human consumption. Emphasis is placed on food safety and proper environmental control measures to minimize health dangers. |

***\**** (Confirm with the Registrar’s Office that number chosen has not been used before and is available for use. For variable credit courses, indicate variable range. *Proposed number for experimental course is 9*. )

\*\*Forty words or fewer as it should appear in the Bulletin.

1. **Proposed prerequisites and major restrictions** **[Modification requested? Yes/No]**

(Indicate all prerequisites. If this course is restricted to a specific major, which major. If a student does not have the prerequisites or does not have the appropriate major, the student will not be allowed to register).

1. **Yes** Are there any prerequisites?
   1. If yes, which ones?

Must be admitted to the OESH program.

OESH 3203 Control of Occupational Hazards

OESH 3223 Industrial Hygiene Sampling and Analysis Lab

OESH 3303 Water, Wastewater, Solid and Hazardous Waste management

OESH 3313 Epidemiology and Biostatistics

POSC 4533 Environmental Law and Administration

* 1. Why or why not?

A basic understanding of disease-causing microorganisms is needed to understand the role of microbes in food sanitation. An understanding of the various microbe destruction techniques is needed. Students enrolled in the OESH major/program should have completed prerequisites coursework prior to enrolling in OESH courses and have taken some OESH coursework before this course.

1. **Yes** Is this course restricted to a specific major?
   1. If yes, which major? Occupational and Environmental Safety and Health
2. **Proposed course frequency [Modification requested? Yes/No]**

(e.g. Fall, Spring, Summer; if irregularly offered, please indicate, “irregular.”) *Not applicable to Graduate courses.*

Fall

1. **Proposed course type [Modification requested? Yes/No]**

Will this course be lecture only, lab only, lecture and lab, activity (e.g., physical education), dissertation/thesis, capstone, independent study, internship/practicum, seminar, special topics, or studio? Please choose one.

**Lecture only**

1. **Proposed grade type [Modification requested? Yes/No]**

What is the grade type (i.e. standard letter, credit/no credit, pass/fail, no grade, developmental, or other [please elaborate])

**Standard Letter grade**

1. **No** Is this course dual-listed (undergraduate/graduate)?
2. **/ No** Is this course cross-listed?

*(If it is, all course entries must be identical including course descriptions. Submit appropriate documentation for requested changes. It is important to check the course description of an existing course when adding a new cross-listed course.)*

**a.** – If yes, please list the prefix and course number of the cross-listed course.

Enter text...

**b.** – **Yes / No** Can the cross-listed course be used to satisfy the prerequisite or degree requirements this course satisfies?

Enter text...

1. **Yes**  Is this course in support of a new program?

a. If yes, what program?

Occupational and Environmental Safety and Health

1. **No** Will this course be a one-to-one equivalent to a deleted course or previous version of this course (please check with the Registrar if unsure)?

a. If yes, which course?

Enter text...

**Course Details**

1. **Proposed outline** **[Modification requested? Yes/No]**

(The course outline should be topical by weeks and should be sufficient in detail to allow for judgment of the content of the course.)

|  |  |
| --- | --- |
| Week | Topic/Assignments |
| 1 | Introduction to Food Safety and Sanitation |
| 2 | Microorganisms and food safety |
| 3 | Microbial Destruction techniques |
| 4 | Food Contamination Sources |
| 5 | Personal Hygiene and Food Safety |
| 6 | The Role of HACCP in food sanitation |
| 7 | QA/QC for food sanitation |
| 8 | Cleaning Compounds in Food Safety |
| 9 | The role of Sanitizers in Food sanitation |
| 10 | Sanitation Equipment |
| 11 | Waste Product Handling and Food Safety |
| 12 | Pest Control |
| 13 | Sanitary Design and Construction |
| 14 | Low-moisture food sanitation/Dairy processing |
| 15 | Meat/Poultry Processing |

1. **Proposed special features** **[Modification requested? Yes/No]**

(e.g. labs, exhibits, site visitations, etc.)

Proposed visit to a local food processing plant is planned

1. **Department staffing and classroom/lab resources**

Traditional classroom setting

1. Will this require additional faculty, supplies, etc.?

No

1. **No** Does this course require course fees?

*If yes: please attach the New Program Tuition and Fees form, which is available from the UCC website.*

**Justification**

**Modification Justification (Course Modifications Only)**

1. Justification for Modification(s)

**New Course Justification (New Courses Only)**

1. Justification for course. Must include:

a. Academic rationale and goals for the course (skills or level of knowledge students can be expected to attain)

This course is an introduction to the principles of food safety and sanitation, a critical topic for environmental health practitioners. Food safety, both in food production and service, is vital to community health. Topics covered will be sources and causes of food contamination and prevention principles and techniques.

b. How does the course fit with the mission of the department? If course is mandated by an accrediting or certifying agency, include the directive.

The core mission of the College of Nursing and Health Professions is to provide a comprehensive and quality education to students seeking careers in various areas of health professions including environmental health. The mission of the OESH program is to educate the next generation(s) of environmental health and safety practitioners that will be able to function effectively in industrial settings, the public sector, or academia, and to produce valuable occupational safety and environmental health specialists that act ethically in the practice considering the implications to the health of workers and the environment.

Students need to have a basic understanding of food safety and sanitation in order to anticipate and recognize hazards in food production and food service industries related to poor sanitation techniques. The National Environmental Health Science and Protection Accreditation Council (NEHSPAC/EHAC), the council that we will be seeking accreditation from, mandates that students should be able to demonstrate a competency and have been exposed to most topic areas foundational to Environmental Health. One of the six core areas assigned by the council is Food Protection.

c. Student population served.

This course is required for students seeking a bachelor’s degree in Occupational and Environmental Safety and Health.

d. Rationale for the level of the course (lower, upper, or graduate).

This course is designated at a higher level due to the prerequisite needs of the course. Students should have completed a course and laboratory in microbiology.

**Assessment**

**Assessment Plan Modifications (Course Modifications Only)**

1. **Yes / No** Do the proposed modifications result in a change to the assessment plan?

*If yes, please complete the Assessment section of the proposal*

**Relationship with Current Program-Level Assessment Process (Course modifications skip this section unless the answer to #18 is “Yes”)**

1. What is/are the intended program-level learning outcome/s for students enrolled in this course? Where will this course fit into an already existing program assessment process?

This course if emphasized and reinforced in PLO-1, PLO-2, PLO-3, and PLO-4 as an upper level OESH course

1. Considering the indicated program-level learning outcome/s (from question #19), please fill out the following table to show how and where this course fits into the program’s continuous improvement assessment process.

*For further assistance, please see the ‘Expanded Instructions’ document available on the UCC - Forms website for guidance, or contact the Office of Assessment at 870-972-2989.*

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| **Program-Level Outcome 1 (from question #23)** | Students will be able to apply a broad base of science, mathematics, and communication knowledge to anticipate, recognize, and quantify environmental health and occupational safety hazards. |
| Assessment Measure | Direct measure: OESH 4003 Internship and OESH 4401 Senior Seminar act as a capstone to the program. Internship preceptors and instructors will be given a detailed evaluation form to fill out upon internship completion to assess for critical thinking skills in anticipating, recognizing and evaluating environmental health and occupational safety hazards. Students will also be given mock certification exams in either environmental health or occupational safety in the OESH 4401 Senior Seminar course. The grade outcomes of these exams will also be used to assess the program. Indirect measures: Students will be given program exit surveys in the OESH 4401 Senior Seminar course to assess the program. |
| Assessment  Timetable | Annually |
| Who is responsible for assessing and reporting on the results? | Course faculty and Dr. Julie King, Program Chair Occupational and Environmental Safety and Health, juking@astate.edu, 870-972-3920 |

*(Repeat if this new course will support additional program-level outcomes)*

|  |  |
| --- | --- |
| **Program-Level Outcome 2 (from question #23)** | Students should be able to communicate occupational and environmental standards, studies, and programs effectively and professionally with a wide range of audiences verbally and in writing through publications, presentations, and technical reports. |
| Assessment Measure | Direct measure: OESH 4003 Internship and OESH 4401 Senior Seminar act as a capstone to the program. Students will be required to give a formal presentation in the OESH 4401 Senior seminar detailing their experiences in the internship. Presentations will be evaluated for communication skills. Internship preceptors and instructors will also give detailed evaluations on the students’ ability to communicate with a variety of audiences. Indirect measures: Students will be given program exit surveys in the OESH 4401 Senior Seminar course to assess the program. |
| Assessment  Timetable | Annually |
| Who is responsible for assessing and reporting on the results? | Course faculty and Dr. Julie King, Program Chair Occupational and Environmental Safety and Health, juking@astate.edu, 870-972-3920 |

|  |  |
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| **Program-Level Outcome 3 (from question #23)** | Students will be able to design and conduct environmental or workplace studies, experiments, or investigations, then analyze data and draw appropriate conclusions using sound scientific judgement. |
| Assessment Measure | Direct measure: OESH 4003 Internship and OESH 4401 Senior Seminar act as a capstone to the program. Internship preceptors and instructors will be given a detailed evaluation form to fill out upon internship completion to assess for ability to design and conduct detailed workplace studies, experiments, and investigations. Students will also be assessed for their ability to draw sound scientific conclusions using data from these experiments. Students ability to conduct these investigations will also be assessed by program faculty in their formal presentation of their internship experiences required in OESH 4401 Senior Seminar. Indirect measures: Students will be given program exit surveys in the OESH 4401 Senior Seminar course to assess the program. |
| Assessment  Timetable | Annually |
| Who is responsible for assessing and reporting on the results? | Course faculty and Dr. Julie King, Program Chair Occupational and Environmental Safety and Health, juking@astate.edu, 870-972-3920 |

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| **Program-Level Outcome 4 (from question #23)** | Students should be able to design, analyze, and evaluate environmental health or occupational safety management systems or programs including ethical considerations, stakeholder interests, and fiscal responsibility. |
| Assessment Measure | Direct measure: OESH 4003 Internship and OESH 4401 Senior Seminar act as a capstone to the program. Internship preceptors and instructors will be given a detailed evaluation form to fill out upon internship completion to assess for student’s ability to design, analyze and evaluate OESH programs. Students will also be assessed by program faculty in a formal presentation of their internship experience which will be completed in OESH 4401 Senior Seminar. Students will also be assessed by exam scores on mock certification exams to be taken in the senior seminar course. Indirect measures: Students will be given program exit surveys in the OESH 4401 Senior Seminar course to assess the program. |
| Assessment  Timetable | Annually |
| Who is responsible for assessing and reporting on the results? | Course faculty and Dr. Julie King, Program Chair Occupational and Environmental Safety and Health, juking@astate.edu, 870-972-3920 |

**Course-Level Outcomes**

1. What are the course-level outcomes for students enrolled in this course and the associated assessment measures?

|  |  |
| --- | --- |
| **Outcome 1** | Explain various types of food contamination and factors that contribute to foodborne illness and describe the dangers of foodborne illness |
| Which learning activities are responsible for this outcome? | Readings, lectures, discussion boards, homework assignments, exams |
| Assessment Measure | Direct measure: Exam rubric benchmark 85% |

*(Repeat if needed for additional outcomes)*

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| **Outcome 2** | Demonstrate the ability to explore and apply proper food handling techniques that will eliminate possible foodborne illness. |
| Which learning activities are responsible for this outcome? | Readings, lectures, discussion boards, homework assignments, exams |
| Assessment Measure | Direct measure: exams, homework assignments, and writing assignments. |

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| **Outcome 3** | Identify food handler health problems that are a possible threat to food safety |
| Which learning activities are responsible for this outcome? | Readings, lectures, discussion boards, homework assignments, exams |
| Assessment Measure | Learning outcomes will be reinforced |

|  |  |
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| **Outcome 4** | Demonstrate an understanding of laws and regulations governing food safety (HACCP, FSMA, and HARPC). |
| Which learning activities are responsible for this outcome? | Readings, Lectures, discussion boards |
| Assessment Measure | Discussion board rubric benchmark 85% |

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| **Outcome 5** | Identify and explain the mode of action of various food sanitization techniques |
| Which learning activities are responsible for this outcome? | Lectures, readings, written assignments |
| Assessment Measure | Written assignment rubric benchmark 85% |

**Bulletin Changes**

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| **Instructions** |
| **Please visit** [**http://www.astate.edu/a/registrar/students/bulletins/index.dot**](http://www.astate.edu/a/registrar/students/bulletins/index.dot) **and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Please include a before (with changed areas highlighted) and after of all affected sections.**  **\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.** |

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Insert

**Major in Occupational and Environmental Safety and Health**

*Bachelor of Science*

|  |  |
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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 42) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| UC 1013, Making Connections | **3** |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate degrees (p. 78)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *CHEM 1013 and CHEM 1011 General Chemistry and Lab*  *BIO 2013 and BIO 2011 Biology of the Cell and Lab*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Major Requirements:** | **Sem. Hrs.** |
| OESH 3013 Fundamentals of Occupational Safety | 3 |
| OESH 3023 Principles of Environmental Health | 3 |
| OESH 3103 Recognition of Occupational Hazards | 3 |
| OESH 3113 Toxicology | 3 |
| OESH 3203 Control of Occupational Hazards | 3 |
| OESH 3223 Industrial Hygiene Sampling and Analysis Laboratory | 3 |
| OESH 3303 Water, wastewater, Solid and Hazardous Waste Treatment | 3 |
| OESH 3313 Epidemiology and Biostatistics | 3 |
| DPEM 3503 Principles of Disaster Preparedness and Emergency Management | 3 |
| OESH 4003 OESH Internship | 3 |
| OESH 4013 OSHA Standards and Practices | 3 |
| OESH 4113 Environmental Health and Safety Management | 3 |
| OESH 4203 Principles of Food Safety and Sanitation | 3 |
| OESH 4213 Construction Safety | 3 |
| OESH 4223 Accident Investigation and Analysis | 3 |
| OESH 4303 Environmental Risk Assessment | 3 |
| OESH 4313 Ergonomics | 3 |
| OESH 4323 Air Pollution | 3 |
| OESH 4401 OESH Senior Seminar | 1 |
| POSC 4533 Environmental Law and Administration | 3 |

**Page 534 Course Descriptions**

**OESH 4203 Principles of Food Safety and Sanitation** - Principles and techniques applied to the protection of food for human consumption. Emphasis is placed on food safety and proper environmental control measures to minimize health dangers. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 3203, OESH 3223, OESH 3303, OESH 3313, and POSC 4533. Fall.