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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)**

Julie King, Arkansas State University, College of Nursing & Health Professions, P.O. Box 910, State University, AR 72469, [juking@astate.edu](mailto:juking@astate.edu) 870-972-3920

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.”*

|  |  |  |
| --- | --- | --- |
|  | **Current (Course Modifications Only)** | **Proposed (New or Modified)**  *(Indicate “N/A” if no modification)* |
| **Prefix** |  | **OESH** |
| **Number\*** |  | **4223** |
| **Title** |  | **Accident Investigation and Analysis**  **Short Title: Accident Analysis** |
| **Description\*\*** |  | Introduction to principles and practices for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, and accident investigation analysis. |

***\**** (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 OESH program.

OESH 4003 Internship

OESH 4013 OSHA Standards and Practices

OESH 4113 Environmental Health and Safety Management

OESH 4203 Principles of Food Safety and Sanitation

* 1. Why or why not?

Students admitted to the OESH program should have complete the prerequisites coursework and have completed OESH coursework prior to 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.*

**Spring**

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**

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])

Letter grade

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

*(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? Yes

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 and the Role of the Safety Professional |
| 2 | The Role of Safety Culture in Preventing Accidents |
| 3 | Loss Control Programs |
| 4 | Safety and Health Auditing |
| 5 | Environmental Auditing |
| 6 | Hazard Identification |
| 7 | Incident Investigation and Analysis |
| 8 | Cost of Incident Analysis |
| 9 | Understanding Incidence Rates |
| 10 | Injury and Illness Record Keeping |
| 11 | Workers’ Compensation |
| 12 | Introduction to Emergency Preparedness |
| 13 | Process Safety Management |
| 14 | Transportation Safety Programs |
| 15 | Office and Laboratory Safety |
|  |  |

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

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

None

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

Traditional classroom setting

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

No

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

*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)

Enter text...

**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)

Occupational safety professionals are an integral part of both public and private sector industry. One of the functions of the occupational safety professional is to investigate when incidents and accidents occur. They are often responsible for the OSHA record-keeping and reporting as well. An understanding of accident investigation is needed to carry out these functions so students will gain knowledge in investigation analysis and accident theory. A proper understanding of why accidents happen, and the implementation of corrective actions is necessary to preventing future accidents. One part of the prevention of accidents is the safety inspection. Students will also learn how to design and implement a robust safety inspection system and learn how to take corrective action.

1. 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 occupational health and safety. 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 accident investigation and exposure to the design concepts of the safety inspection. 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 in foundational Environmental Health. One of the six core areas assigned by the council is Occupational Health and Safety. Accident investigation is a fundamental area of occupational health and safety impacting workers in nearly every industry.

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).

Offering this course as an upper level course allows students to apply skills and knowledge gained in lower level science courses such as chemistry, biology, and statistics and have completed prior OESH coursework that this course builds upon such as OESH 3013 Fundamentals of Occupational Safety.

**Assessment**

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

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

*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?

Program level learning outcomes are outlined in the tables below. This course will touch on all four of the program level learning outcomes for the Occupational and Environmental Safety and Health program. Not only will students have critical thinking skills reinforced but will take part in the design and communication of an accident analysis that includes upper level concepts such as stake holder and financial responsibility for incidents or accidents.

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)** | SLO – 1 Students will demonstrate critical thinking skills to anticipate, recognize, and evaluate hazards affecting human health and the environment and develop and evaluate effective strategies to solve problems and mitigate risk. |
| 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 program chair: Julie King, Arkansas State University, College of Nursing & Health Professions, P.O. Box 910, State University, AR 72469, [juking@astate.edu](mailto:juking@astate.edu) 870-972-3920 |

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

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| **Program-Level Outcome 2 (from question #23)** | SLO – 2 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 program chair: Julie King, Arkansas State University, College of Nursing & Health Professions, P.O. Box 910, State University, AR 72469, [juking@astate.edu](mailto: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 program chair: Julie King, Arkansas State University, College of Nursing & Health Professions, P.O. Box 910, State University, AR 72469, [juking@astate.edu](mailto: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 program chair: Julie King, Arkansas State University, College of Nursing & Health Professions, P.O. Box 910, State University, AR 72469, [juking@astate.edu](mailto: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?

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| --- | --- |
| **Outcome 1** | Describe the components of an effective accident investigation and analyze factors which contributed to accidents |
| Which learning activities are responsible for this outcome? | Lectures  Assigned readings  Homework Assignments |
| Assessment Measure | Direct measure: Final exam rubric benchmark 85% |

*(Repeat if needed for additional outcomes)*

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| **Outcome 2** | Recommend appropriate changes and corrective actions to prevent further accidents |
| Which learning activities are responsible for this outcome? | Lectures  Assigned readings  Homework Assignments  Exams  Discussion board assignments |
| Assessment Measure | Direct measure: Discussion board assignment rubric benchmark 85% |

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| **Outcome 3** | Explain the components of an effective safety investigation and make appropriate recommendations to correct hazards identified by the inspection. |
| Which learning activities are responsible for this outcome? | Lectures  Assigned readings  Written assignments  Exams |
| Assessment Measure | Direct measure: Final presentation rubric benchmark 85% |

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| **Outcome 4** | Explain concepts such as types of safety inspections, estimating incident costs, definitions of work incidents for cost analysis. |
| Which learning activities are responsible for this outcome? | Lectures  Assigned readings  Homework Assignments  Written assignments  Exams |
| Assessment Measure | Direct measure: Final exam rubric benchmark 85% |

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| **Outcome 5** | Understand OSHA record-keeping requirements and concepts such as incidence rates. |
| Which learning activities are responsible for this outcome? | Lectures  Assigned readings  Homework Assignments  Written assignments  Discussion board posts  Exams |
| Assessment Measure | Direct measure: final exam 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**

**Occupational and Environmental Safety and Health (OESH)**

**OESH 4223 Accident Investigation and Analysis**- Introduction to principles and practices for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, and accident investigation analysis. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203. Spring.