|  |
| --- |
| For Academic Affairs and Research Use Only |
| Proposal Number | NHP19 |
| CIP Code:  |  |
| Degree Code: |  |

**NEW OR MODIFIED COURSE PROPOSAL FORM**

**[X] Undergraduate Curriculum Council**

**[ ] Graduate Council**

|  |
| --- |
| **[ ]New Course, [ ]Experimental Course (1-time offering), or [X]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.

|  |  |
| --- | --- |
| Amy Hyman 3/9/2022**Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**COPE Chair (if applicable)** |
| Joseph L. Richmond 3/10/2022**Department Chair** | Julie B. King 3/7/2022**Head of Unit (if applicable)**   |
| Shanon Brantley 3/22/2022**College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Undergraduate Curriculum Council Chair** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Director of Assessment (new courses only)** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Graduate Curriculum Committee Chair** |
| \_\_\_\_\_\_\_\_\_\_Scott E. Gordon\_\_\_\_\_\_\_\_\_ 3/22/22**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. Amy Hyman, ahyman@astate.edu 870-680-8286

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

Fall 2022, Bulletin Year 2022-2023.

**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**  | **N/A** |
| **Number\*** | **3313** | **N/A** |
| **Title** (include a short title that’s 30 characters or fewer) | **Epidemiology ~~and Biostatistics~~** | **Epidemiology**  |
| **Description\*\*** | Introduction to basic concepts of epidemiology and biostatistics as well as some of the basic techniques of public health and evidence-based medicine. ~~Admission to the Occupational and Environmental Safety and Health Program Required.~~ Prerequisites, ~~OESH 3013, OESH 3023, OESH 3103, OESH 3113, and DPEM 3503~~ STAT 3033 or STAT 3233. Spring  | Introduction to basic concepts of epidemiology as well as some of the basic techniques of public health and evidence-based medicine. Prerequisites, STAT 3033 or STAT 3233. Spring  |

 ***\**** 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 (excepting prerequisites and other restrictions) as it should appear in the Bulletin.

1. **Proposed prerequisites and major restrictions** **[Modification requested? Yes]**

(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?

STAT 3033 Statistics for the Health Professions or STAT 3233 Applied Statistics I

* 1. Why or why not?

A basic understanding of statistics is necessary to understand the basic statistics used in epidemiology.

1. **NO** Is this course restricted to a specific major?
	1. If yes, which major? **REMOVE: ADMISSION TO THE OCCUPATIONAL AND ENVIRONMENTAL SAFETY AND HEALTH PROGRAM** Enter text...
2. **Proposed course frequency [Modification requested? No]**

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

Enter text...

1. **Proposed course type [Modification requested? 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.

Enter text...

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

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

Enter text...

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. **NO** Is this course in support of a new program?

a. If yes, what program?

 Enter text...

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? 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 Foundations of Epidemiology |
| 2 | Historic Events in Epidemiology  |
| 3 | Disease concepts in Epidemiology |
| 4 | Design Strategies and Stat methods in Descriptive Epidemiology |
| 5 | Epidemiology according to Person, Place and Time |
| 6 | General Health and Population Indicators |
| 7 | Design Strategies and Statistical methods in Analytic Epidemiology |
| 8 | Producing Data – Confounding, Sampling, Bias, and Experiments |
| 9 | Inferential Statistics – Part IProbability, Sampling Distributions, Confidence Intervals, Tests of Significance, Type I and II errors |
| 10 | Inferential Statistics – Part IIT-tests, Chi-square tests, ANOVA |
| 11 | Experimental Studies in Epidemiology |
| 12 | Causality |
| 13 | Chronic Disease Epidemiology |
| 14 | Clinical Epidemiology |
| 15 | Public Health Surveillance |

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

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

Enter text...

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

Department faculty will teach this course

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)

We would like to drop the biostatistics from the course because both epidemiology and biostatistics can be standalone courses. This course will be an undergraduate epidemiology course and a fundamental understanding of statistics is necessary. The OESH program was originally meant to be a lock step program, but we would like to have students be able to take this course as their schedule permits. Students from other disciplines may also have an interest in undergraduate epidemiology so opening this course up to other majors will allow us to serve more students.

**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)

 Enter text...

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.

 Enter text...

c. Student population served.

Enter text...

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

Enter text...

**Assessment**

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

1. **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?

Enter text...

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.*

|  |  |
| --- | --- |
| **Program-Level Outcome 1 (from question #19)** | Type outcome here. What do you want students to think, know, or do when they have completed the course? |
| Assessment Measure | Please include direct and indirect assessment measure for outcome.  |
| Assessment Timetable | What semesters, and how often, is the outcome assessed? |
| Who is responsible for assessing and reporting on the results? | Who (person, position title, or internal committee) is responsible for assessing, evaluating, and analyzing results, and developing action plans? |

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

 **Course-Level Outcomes**

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

|  |  |
| --- | --- |
| **Outcome 1** | Type outcome here. What do you want students to think, know, or do when they have completed the course? |
| Which learning activities are responsible for this outcome? | List learning activities. |
| Assessment Measure  | What will be your assessment measure for this outcome?  |

*(Repeat if needed for additional outcomes)*

**Bulletin Changes**

|  |
| --- |
| **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.**  |

PAGE 400 BEFORE

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 47) |  |
| **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. 84)**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 Health and 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 4633, Environmental Law and Administration | 3 |
| **Sub-total** | **58** |

Page 574 Before

**OESH 3303. Water, Wastewater, Solid and Hazardous Waste Treatment** Water quality, water supply, and wastewater disposal, as well as solid and hazardous waste management, treatment, and disposal technology. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 3013, OESH 3023, OESH 3103, OESH 3113, and

DPEM 3503. Spring.

 **OESH 3313. Epidemiology ~~and Biostatistics~~** Introduction to basic concepts of epidemiology ~~and biostatistics~~ as well as some of the basic techniques of public health and evidence-based medicine. ~~Admission to the Occupational and Environmental Safety and Health Program required.~~ Prerequisites, ~~OESH 3013, OESH 3023, OESH 3103, OESH 3113, and DPEM 3503.~~ STAT 3033 or STAT 3233. Spring.

**OESH 4003. Internship** Supervised field-based experience in a private or public industrial, hospital, or governmental agency. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 3203, OESH 3223, OESH 3303, OESH 3313, and POSC 4633. Fall.

**OESH 4013. OSHA Standards and Practices** Anticipation, identification, and evaluation of health and safety hazards and application of safety and health laws and OSHA regulations. Admis- sion to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 3203, OESH 3223, OESH 3303, and OESH 3313. Fall.

**OESH 4113. Environmental Health and Safety Management** Introduction to EHS management principles in both office and industrial settings to develop safer and healthier work environments. Admission to the Occupational and Environmental Safety and Health Program required. Prereq- uisites, OESH 3203, OESH 3223, OESH 3303, OESH 3313, and POSC 4633. Fall.

**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 4633. Fall.

**OESH 4213. Construction Safety** Occupational safety hazards associated with the construction industry. Emphasis is placed on OSHA policies, procedures, and standards as well as construction health and safety principles. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203. Spring.

**OESH 4223. Accident Investigation and Analysis** Introduction to principles and practices for understanding the nature of occupational hazard recognition, accident prevention, loss reduc- tion, 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.

**OESH 4303. Environmental Risk Assessment** Introduction to risk analysis and ex- amination of the fundamental aspects of risk, focusing on environmental and public health risks including hazard identification, exposure assessments, and risk communication. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203. Spring.

**OESH 4313. Ergonomics** Introduction to the principles of ergonomics including fundamental ter- minology, concepts and applications of physiology, anthropometry, biomechanics, and engineer- ing to workplace design. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203.

Spring.

**OESH 4323. Air Pollution** Pollutants, health effects, and technologies for controlling for emis- sions. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203. Spring.

PAGE 400 AFTER

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 47) |  |
| **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. 84)**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 Health and 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 | 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 4633, Environmental Law and Administration | 3 |
| **Sub-total** | **58** |

PAGE 574 AFTER

**OESH 3303. Water, Wastewater, Solid and Hazardous Waste Treatment** Water quality, water supply, and wastewater disposal, as well as solid and hazardous waste management, treatment, and disposal technology. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 3013, OESH 3023, OESH 3103, OESH 3113, and

DPEM 3503. Spring.

**OESH 3313. Epidemiology** Introduction to basic concepts of epidemiology as well as some of the basic techniques of public health and evidence-based medicine. Prerequisites, STAT 3033 or STAT 3233. Spring.

**OESH 4003. Internship** Supervised field-based experience in a private or public industrial, hospital, or governmental agency. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 3203, OESH 3223, OESH 3303, OESH 3313, and POSC 4633. Fall.

**OESH 4013. OSHA Standards and Practices** Anticipation, identification, and evaluation of health and safety hazards and application of safety and health laws and OSHA regulations. Admis- sion to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 3203, OESH 3223, OESH 3303, and OESH 3313. Fall.

**OESH 4113. Environmental Health and Safety Management** Introduction to EHS management principles in both office and industrial settings to develop safer and healthier work environments. Admission to the Occupational and Environmental Safety and Health Program required. Prereq- uisites, OESH 3203, OESH 3223, OESH 3303, OESH 3313, and POSC 4633. Fall.

**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 4633. Fall.

**OESH 4213. Construction Safety** Occupational safety hazards associated with the construction industry. Emphasis is placed on OSHA policies, procedures, and standards as well as construction health and safety principles. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203. Spring.

**OESH 4223. Accident Investigation and Analysis** Introduction to principles and practices for understanding the nature of occupational hazard recognition, accident prevention, loss reduc- tion, 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.

**OESH 4303. Environmental Risk Assessment** Introduction to risk analysis and ex- amination of the fundamental aspects of risk, focusing on environmental and public health risks including hazard identification, exposure assessments, and risk communication. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203. Spring.

**OESH 4313. Ergonomics** Introduction to the principles of ergonomics including fundamental ter- minology, concepts and applications of physiology, anthropometry, biomechanics, and engineer- ing to workplace design. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203.

Spring.

**OESH 4323. Air Pollution** Pollutants, health effects, and technologies for controlling for emis- sions. Admission to the Occupational and Environmental Safety and Health Program required. Prerequisites, OESH 4003, OESH 4013, OESH 4113, and OESH 4203. Spring.