

**PROPOSAL TO THE SENATE COMMITTEE ON EDUCATIONAL POLICY TO
ESTABLISH OR MODIFY AN UNDERGRADATE MINOR**

Title of proposal:

Establishment of an Undergraduate Minor in Agricultural Safety and Health, College of ACES

Sponsoring unit(s):

Department of Agricultural and Biological Engineering, College of ACES
Robert Aherin, Professor 333-9417 raherin@uiuc.edu

Brief description of the program of study:

The minor in agricultural safety and health is designed to provide students with an in-depth understanding of the occupational safety and health issues associated with production agriculture. The program familiarizes students with the primary injury and illness control methodologies of behavioral persuasion and motivation, engineering design, and regulation or enforcement and their related strengths and weaknesses of effecting injury and occupational illness rates among agricultural populations. Additionally, students will develop an understanding of how to develop a safety risk management plan for a farm or other agricultural related business.

This is a campus-wide minor. The minor will be administered by the Department of Agricultural and Biological Engineering through the College of ACES. The minor is not directly associated with any particular major but would complement any degree in agriculture or program with a focus on rural health.

Justification:

The agricultural industry consistently has one of the highest injury and fatality rates among all U.S. industries. The direct and indirect cost of occupational injuries and illnesses to the agricultural industry amounts to billions of dollars annually. There is a strong need to have those who work in this industry to have technical training in injury causation and prevention in order to affectively address the complex issues associated with agricultural safety and health. Recent surveys among agricultural and rural health employers indicated a strong desire for students who are eventually employed in their businesses and organizations to have academic training in this area. Most agricultural and rural health occupations have some level of responsibility for agricultural injury and illness prevention. This need for training is also recognized by the National Institute for Occupational Safety and Health (NIOSH) who has for several years provided partial financial support through competitive grants to the University to support the offering of academic courses in this area.

Budgetary and Staff Implications: No additional resources will be required to administer this proposed minor. No new courses will be needed for this minor.

- a. Additional staff and dollars needed: None
- b. Internal reallocations: None

- c. Effect on course enrollment in other departments: Very minor due to small number of students expected in the minor and the large number of courses that are suitable. Furthermore, it is expected students will be from a variety of majors and it would be anticipated that no more than 1 to 3 students from the program would enroll in any department's courses listed as electives in a given semester. This is because electives will be selected based on a student's career interests and area of academic training. Approval from Departments providing more than three elective courses has been obtained.
- d. Impact on library: Insignificant

Requirements: A minimum of 18 hours must be completed for this minor.

<u>Required Courses for Agricultural Safety and Health Minor</u>	<u>Hours</u>
• TSM 421: <i>Ag Safety – Injury Prevention</i>	3
• TSM 422: <i>Ag Health – Illness Prevention</i>	3
• TSM 425: <i>Applying Safety Interventions</i>	3
A minimum of 3 credit hours is required from the following courses:	
• TSM 293 or ABE 293: <i>Off-Campus Internship</i>	1-4
• TSM 295 or ABE 396: <i>Undergraduate Research Thesis</i>	1-4
• TSM 496 or ABE 295: <i>Independent Study</i>	1-4
A minimum of 6 credit hours selected from:	
• CHLH 101: <i>Introduction to Public Health</i>	3
• CHLH 244: <i>Health Statistics</i>	3
• CHLH 274: <i>Introduction to Epidemiology</i>	3
• CHLH 304: <i>Foundations of Health Behavior</i>	4
• CHLH 469: <i>Environmental Health</i>	3 or 4
• CHLH 474: <i>Principles of Epidemiology</i>	4
• CHLH 540: <i>Health Behavior: Theory</i>	4
• EOHS 400: <i>Principles of Environmental Health Sciences (UIC Web)</i>	3
• EOHS 421: <i>Fundamentals of Industrial Hygiene (UIC Web)</i>	2
• FSHN 480: <i>Basic Toxicology</i>	3
• HDFS 105: <i>Intro to Human Development</i>	3
• HRE 415: <i>Diversity in the Workplace</i>	4
• HRE 585: <i>Program Evaluation</i>	4
• IE 440: <i>Occupational Biomechanics</i>	3 or 4
• IE 442: <i>Safety Engineering</i>	3
• KIN 262: <i>Motor Develop, Growth & Form</i>	3 or 4
• KIN 454: <i>Growth & Physical Development</i>	3 or 4
• PSYC 100: <i>Intro Psych</i>	4
• PSYC 103: <i>Intro Experimental Psych</i>	4
• PSYC 358: <i>Human Factors</i>	4
• PSYC 456: <i>Hum Perf and Eng Psych</i>	3 or 4

Prerequisites for the minor: Any student who has completed at least 30 credit hours of course work with a minimum GPA of 2.50 may apply for the minor. There are no other specific prerequisites.

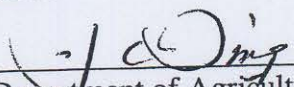
Expected enrollment in the minor: During first two to three years the minor is offered, it is anticipated that 15 to 20 students will select the minor. Once full enrollment is achieved, enrollment is expected to be approximately 40 students.

Admission to the Minor: Students interested in applying for a minor can obtain an application from the Agricultural and Biological Engineering Department. The application contains information regarding their current major and contact information. They also provide a narrative explaining how this minor will be of benefit to their professional career. They must provide a copy of their current transcript. The application materials will be provided to the agricultural safety and health program leader or designee for review and approval.

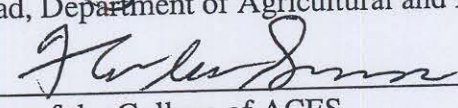
Minor Advisor: Dr. Robert Aherin, Professor and Agricultural Safety and Health Program Leader will monitor and advise student in the minor.

Certification of Successful Completion: Students must apply to the Department of Agricultural and Biological Engineering for admission to the minor. The minor advisor provides the college of ACES academic program office with a listing of the courses for each student in the minor in order for them to be certified as completing the requirements. The college will be notified of any approved changes in a students program by the minor advisor. The college will verify successful completion of all requirements for the minor.

Clearances



Head, Department of Agricultural and Biological Engineering



Dean of the College of ACES

Chair, Senate Educational Policy Committee

12/03/07
Date

12/03/07
Date

Date

Statement for the Catalog:

The Agricultural Safety and Health minor is designed to provide students with an in-depth understanding of agricultural safety and health issues, including how to effectively manage risk. The main program objectives 1) to provide students with a strong base for understanding of the occupational safety and health hazards and issues facing production agriculture; and 2) to familiarize students with the primary injury control methodologies of behavioral persuasion, engineering design, regulation or enforcement and methodologies for effectively managing agricultural safety and health risks.

Students will be required to complete three core courses. Selection of other approved courses in the program will depend on the students' major and interests. Students are required to complete a minimum of 18 credit hours of program approved courses to earn the minor. Courses in the minor cannot be taken Credit/No Credit (CR/NC). Specific requirements are listed in the following table:

Hours	Required Courses
3	TSM 421 – Ag Safety – Injury Prevention
3	TSM 422 – Ag Health – Illness Prevention
3	TSM 424 – Applying Safety Interventions
3	3 hours of credit from one or more of the following courses:
1-4	TSM 293 or ABE 293 – Off-Campus Internship
1-4	TSM 295 or ABE 396 – Undergraduate Research Thesis
1-4	TSM 496 or ABE 295 – Independent Study
6	6 hours of credit from any of the following courses:
3	CHLH 101 – Introduction to Public Health
3	CHLH 244 – Health Statistics
3	CHLH 274 – Introduction to Epidemiology
4	CHLH 304 – Foundations of Health Behavior
3 or 4	CHLH 469 – Environmental Health
4	CHLH 474 – Principles of Epidemiology
4	CHLH 540 – Health Behavior: Theory
3	EOHS 400 – Principles of Environmental Health Sciences (UIC web based course)
2	EOHS 421 – Fundamentals of Industrial Hygiene (UIC web based course)
3	FSHN 480 – Basic Toxicology
3	HDFS 105 – Intro to Human Development
4	HRE 415 – Diversity in the Workplace
4	HRE 585 – Program Evaluation
3 or 4	IE 440 – Occupational Biomechanics
3	IE 442 – Safety Engineering
3 or 4	KIN 262 – Motor Development, Growth & Form
3 or 4	KIN 454 – Growth & Physical Development
4	PSYC 100 – Intro Psych
4	PSYC 103 – Intro Experimental Psych
4	PSYC 358 – Human Factors
3 or 4	PSYC 456 – Hum Perf & Eng Psych
18	Total

The agricultural industry has consistently ranked as having one of the highest injury and fatality rates among all U.S. industries. The direct and indirect cost of occupational injuries and illnesses cost the agricultural industry billions of dollars annually. There is a strong need to have those who work in any aspect of this industry to have technical training in injury causation and

prevention to affectively address the complex issues associated with this problem. Recent surveys among agricultural and rural health employers indicated a strong desire for students who are eventually employed in their businesses and organizations to have academic training in this area. Most agricultural and rural health occupations have some level of responsibility for agricultural injury and illness prevention. This need for training is also recognized by the National Institute for Occupational Safety and Health (NIOSH) who has for several years provided partial financial support through competitive grants to the University to support the offering of academic courses in this area.

For more information regarding the Agricultural Safety and Health minor, contact the Agricultural and Biological Engineering Office, 1304 W. Pennsylvania Avenue, room 336 (Phone: 217-333-9417).