

Course Information

Date Submitted: 4/6/2013

Current Prefix and Number: AEN - Agricultural Engineering , AEN 463G AGR SAFETY &HEALTH

Other Course:

Proposed Prefix and Number: AEN 263

What type of change is being proposed?

Major Change

Should this course be a UK Core Course? No

1. General Information

a. Submitted by the College of: College of Agriculture

b. Department/Division: Biosystems &Agr Engineering

c. Is there a change in 'ownership' of the course? No

If YES, what college/department will offer the course instead: Select...

e. Contact Person

Name: Czarena Crofcheck

Email: crofcheck@uky.edu

Phone: 257-3000

Responsible Faculty ID (if different from Contact)

Name: Mark Purchwitz

Email: purschwitz@uky.edu

Phone: 257-3000

f. Requested Effective Date

Semester Following Approval: Yes OR Effective Semester:

2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: N/A

b. Full Title: AGRICULTURAL SAFETY AND HEALTH

Proposed Title: AGRICULTURAL SAFETY AND HEALTH

c. Current Transcript Title: AGR SAFETY &HEALTH

Proposed Transcript Title: Agr Safety &Health

d. Current Cross-listing: none

Proposed – ADD Cross-listing :

Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

LECTURE: 3

Proposed Meeting Patterns

LECTURE: 3

f. Current Grading System: ABC Letter Grade Scale

Proposed Grading System: *Letter (A, B, C, etc.)*

g. Current number of credit hours: 3

Proposed number of credit hours: 3

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester? No

2i. Current Course Description for Bulletin: The course provides a comprehensive overview of major safety and health hazards in agricultural production and an overview of the basic approaches for the prevention and control of agricultural injuries and illnesses. The course is oriented toward upper class and graduate students.

Proposed Course Description for Bulletin: The course provides an overview of major safety and health hazards in agricultural production (farms) and of the basic approaches to prevention of agricultural injuries and illnesses.

2j. Current Prerequisites, if any: Prereq: AEN 220, AEN 252, and junior standing or consent of instructor.

Proposed Prerequisites, if any: None.

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component:

3. Currently, is this course taught off campus? No

Proposed to be taught off campus? No

If YES, enter the off campus address:

4. Are significant changes in content/student learning outcomes of the course being proposed? No

If YES, explain and offer brief rationale:

5a. Are there other depts. and/or pgms that could be affected by the proposed change? Yes

If YES, identify the depts. and/or pgms: The only department that requires this course in its curriculum is CLD (for students in the agricultural education option of the career and technical education major). Renumbering to a 200-level course helps these students because they would prefer students take it earlier in their program. There have been only three graduate students in six years (2008 to 2013).

5b. Will modifying this course result in a new requirement of ANY program? No

If YES, list the program(s) here:

6. Check box if changed to 400G or 500: No

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|SNOKES|Sue E Nokes|AEN 463G CHANGE Dept Review|20130313

SIGNATURE|LGRABAU|Larry J Grabau|AEN 463G CHANGE College Review|20130926

SIGNATURE|JMETT2|Joanie Ett-Mims|AEN 463G CHANGE Undergrad Council Review|20140312

Explanation for Reclassification of AEN 463G to AEN 263

Mark Purschwitz – April 4, 2013

The overall reason for the requested change is threefold.

1. The primary clientele for this course is agricultural education majors, and their department, Community and Leadership Development, wants them to take the class earlier in their programs to allow more room in their later semesters for other activities, such as student teaching. I currently have some sophomores enrolled in the class, and initially CLD had two freshmen signed up, although they dropped the class prior to the start of semester.
2. I do not believe the course was really a 400G-level course to begin with, nor should it be. I suspect this course was labeled as a 400G course to make it available for graduate credit to county Extension agents working on their masters degrees. This would also explain why it has been an evening class, meeting for three hours once a week.

However, in the six times the course has been taught since I arrived in January 2008, there has been only one Extension agent in the class (spring 2008) and he lived in a neighboring county. I know several agents took the course prior to me arriving, but I suspect those agents also lived relatively close to Lexington. Given this history plus travel and time constraints, I do not see a need for a graduate-level course. Also, should the need arrive, graduate credit can easily be handled through a customized special projects course, such as BAE 599, Topics in Biosystems Engineering, that would include taking AEN 263 plus completing other graduate-level projects to be determined jointly with the student.

3. I am convinced these students need a broad overview of agricultural safety and health, which is a very broad topic, at the level appropriate for “laymen” as opposed to occupational safety and health professionals. The text used prior to my arrival, and initially by me, is a book from the American Society of Agricultural and Biological Engineers (ASABE) intended for professionals in occupational safety and health. I wrote one of the chapters in that book. There are three other books available that could be considered texts, but they are from medicine and public health. I wrote a chapter in two of these three books. Again, these are for professionals in the field. None of these books is an appropriate text for these students.

What these students need can be found in several places. The primary book is a one published by Deere and Co. titled “Farm and Ranch Safety Management.” Secondary sources for certain topics include the “National Safe Tractor and Machinery Operation Program Student Manual” published online by Penn State, and “Rural Rescue and Emergency Care” from the American Academy of Orthopaedic Surgeons. The latter book was developed for rural fire fighters and other emergency responders, and the technical explanations of farm hazards are written at a layman level, plus it has excellent injury photos. I have multiple copies of the two printed texts on reserve in the Agricultural Information Center, and also have students use other online sources, such as the National Agricultural Safety Database.

I am focusing on wider coverage of topics in lecture and homework, with more reading and homework taking the place of a term paper and hazard survey project. Neither of those fit my objective of a broad overview, plus I did not find the results to be especially useful. It is easy to go online and piece together a paper from numerous Extension publications without really understanding the material. Students do take a closer look at topics of interest to them when they prepare their in-class presentations. A surprising number of students do not live on or have access to a working farm with the variety of hazards needed to really learn the hazard survey process, plus to do it properly takes an extraordinary amount of time. I can more easily, proficiently, and thoroughly use my extensive personal library of slides to teach the hazard identification process in class as I cover each topic.

This goes to a significant characteristic of agricultural safety and health, which is that in-depth knowledge is much less important than understanding the basics and actually practicing them. A student who gets an "A" and does not take action at home based on this knowledge is not a success to me, whereas a student who gets a lower grade but actually does something is successful. Based on years of experience as an Extension specialist, I believe that people are more likely to take action if basic principles are emphasized over and over, whereas too much detail (at this level) can make the task of improving safety to appear overwhelming. Obviously this is not how I would teach students majoring in occupational safety and health, if we had such a major.

Furthermore, I have changed one of my objectives to helping them understand why this topic is important to teach in their future high school classes, or to their employees if they farm or manage other businesses. Hammering home the basic principles for them to pass along is more fruitful in my view than providing in-depth knowledge of any particular topic. Plus, I teach them where to look when they need more information or knowledge, and the desire to do so usually does not occur until it is necessary, such as when they are teaching or managing.

AEN 263 Syllabus
AGRICULTURAL SAFETY AND HEALTH
Spring 2014

Lecture: Thursday evenings, 5:30 pm - 8:30 pm
Rm. 227, Charles E. Barnhart Building

Instructor: Dr. Mark Purschwitz, Extension Professor

Office: Room 104 Charles E. Barnhart Building

Phone/ 859-257-3000, ext. 104

Email: purschwitz@uky.edu

Office Hours: Thursdays, 4:30-5:30 pm (right before class); immediately after class; by appointment; or you can always knock on my door to see if I am in.

Textbook: *"Farm and Ranch Safety Management" fifth edition (c2009)* from John Deere (copies will be on reserve in the Agricultural Information Center)

Online book *"National Safe Tractor and Machinery Operation Program Student Manual"*, by Penn State, Ohio State, and the National Safety Council
<http://www.nstmop.psu.edu/> (Go to right column of web page, where you see links to the front of the student manual and Task Sheets.)

Other Important website: National Ag Safety Database <http://nasdonline.org/>

Course Description: The course provides an overview of major safety and health hazards in agricultural production (farms) and of the basic approaches to prevention of agricultural injuries and illnesses.

Prerequisites: None. Some understanding of agricultural production is helpful but not required.

Student Learning Outcomes: After completing this course, the student will be able to:

1. Identify and define safety and health hazards and risks in production agriculture.
2. Identify methods and approaches for controlling hazards and preventing injuries and illnesses in production agriculture.
3. Understand the importance of teaching identification of agricultural safety and health hazards, hazard control, and injury/illness prevention to future students or employees.

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Course Assignments/Exams:

Weekly required readings from textbook and/or online book or websites.

Ten (10) weekly homework assignments of short answer and/or multiple-choice and true-false questions based on required readings; assignments vary in length from 20 to 40 questions, one point per question. Homework is due at the beginning of the class the day it is due; a hard copy (paper) is required. Late homework will be accepted up to one week late, but will be penalized 50%. Homework will not be accepted more than one week late. [Note: This penalty and deadline will be waived for one week following an excused absence, or may be waived in extraordinary circumstances at the discretion of the instructor.]

Two oral PowerPoint presentations, minimum eight minutes long, with copy of PowerPoint for every student in class (student responsible for printing/stapling); one presentation prior to spring break, one after. Graded on 20-point scale based on criteria to be specified in handout on first day of class. Also included in that handout will be details about presentation topics.

Mid-term exam covering all readings, homework assignments, and lectures up to that point; approximately 100 multiple-choice questions, one point per question. [Note: Special circumstances of individual students needing to take the exam on a different date or time because of an excused absence or conflict should be discussed with the instructor in advance, unless involving unexpected circumstances such as an illness or death in the family. All students with excused absences will be allowed to take the exam at a later date without penalty. Students missing an exam without an excused absence will be penalized up to 33% at the discretion of the instructor, following a discussion about the absence with the student.]

Final exam during finals week – comprehensive, covering all readings, homework assignments, and lectures for entire class; approximately 200 multiple-choice questions, one point per question. [Note: Special circumstances of individual students needing to take the final exam on a different date or time because of an excused absence or conflict should be discussed with the instructor in advance, unless involving unexpected circumstances such as an illness or death in the family. All students with excused absences will be allowed to take the exam at a later date without penalty, up to within two days of the deadline for turning in final grades. Students missing an exam without an excused absence will be penalized up to 33% at the discretion of the instructor, following a discussion about the absence with the student, again up to within two days of the deadline for turning in final grades.]

Grading (percentage of grade):

Class Presentations (2)	20%
Homework (and in-class quizzes, if any)	40%
<u>Exams (2) -- Mid-term; Final (equally weighted)</u>	<u>40%</u>
<i>Total</i>	100%

Example of point/percentage calculations given on next page.

(cont.)

Example of point/percentage calculations: Points will be added up for each type of work, then weighted for a 100 percentage point scale. (a) Total number of points possible for two presentations is 40. Say student earns 36 points. $36/40 = 0.90$ or 90.0% of possible points. Weighted at 20%, $90.0\% \times 0.20 = 18.0\%$. (b) Say total number of points possible for all homework assignments is 300. Student gets 250 questions correct, or 250 points. $250/300 = 0.833$ or 83.3% of possible points. Weighted at 40%, $83.3\% \times 0.40 = 33.3\%$. (c) Say total number of points possible for exams is 320. Student gets 275 questions correct, or 275 points. $275/320 = 0.859$ or 85.9% of possible points. Weighted at 40%, $85.9\% \times 0.40 = 34.4\%$. (d) Adding up percentages from all three types of work, total score for grading is as follows:

Presentations	18.0%
Homework	33.3%
<u>Exams</u>	<u>34.4%</u>
<i>Total for class</i>	85.7% to be used in grading scale below

AEN 263 Grading Scale

90-100%	A
80-89	B
70-79	C
60-69	D
Below 60	E

Final Exam: Unless otherwise announced in class, will be held during finals week at the regular class time, day, and place. This is per registrar instructions for evening classes meeting once per week. For this class, it means Thursday at 5:30 pm. Any changes will be announced.

Mid-term Grades: Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/Registrar/AcademicCalendar.htm>)

Course Policies:

Submission of Assignments: As described above -- Homework is due at the beginning of class the on the due date, in hard copy (paper) form. Late penalties as described above will be 50% for homework up to one week late; homework is not accepted after one week late, except for special circumstances, as described above.

Class Participation and Attendance: Since class discussion (including student presentations) will be emphasized throughout the course, attendance and participation is important and students are expected to attend all classes and stay for the entire class period. Attendance will not formally taken and used as part of the grading process, but because students are expected to attend except with excused absences (as defined below) the instructor reserves the right to keep notes on attendance if a particular student seems to be absent frequently with unexcused absences, and take that into account in any disagreements regarding homework or test questions. Conversely, if a particular student has excellent attendance, especially with frequent participation in class discussions, the instructor reserves the right to bump up that student's grade if he/she falls just below the cutoff point on the grading scale. Thus it is to the student's advantage to have excellent attendance and to participate in class.

If you have an excused absence, please contact me in advance. This is especially important for an exam day.

Also -- If you miss a class, it is your responsibility to have another student collect handouts and take notes for you.

Official University of Kentucky information/wording on excused absences, integrity (dishonesty), and disabilities:

Excused Absences:

Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit “reasonable cause for nonattendance” by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Verification of Absences:

Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request “appropriate verification” when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

Academic Integrity:

Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online

<http://www.uky.edu/StudentAffairs/Code/part2.html>) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Accommodations due to disability:

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

End of official University of Kentucky information/wording on excused absences, integrity (dishonesty), and disabilities.

Classroom Behavior Policies:

The classroom will be governed by mutual courtesy and respect for other people and their opinions. As such, people should not interrupt others, should speak only when called upon, and keep cell phones silenced. Students are expected to pay attention during lectures, and especially so during student presentations, as it is a sign of disrespect to fellow students and their efforts to ignore their presentations by texting or talking with other students.

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AEN 263 AGRICULTURAL SAFETY AND HEALTH
Spring 2014 Course Outline (tentative)

Date and Topic (dates are Thursday evenings)

- Jan. 16 Introduction to Agricultural Safety and Health; Injury and Fatality Data
- Jan. 23 Human Factors; Noise; Cumulative Musculoskeletal Injury
- Jan. 30 Tractor Safety, Tractor Geometry, Roll-Over Protection (ROPS)
- Feb. 6 Agricultural Machinery Hazards (*Round 1 student presentations begin*)
- Feb. 13 Livestock Handling Safety (*Round 1 student presentations, cont.*)
- Feb. 20 Electrical Safety; Fire Safety (*Round 1 student presentations, cont.*)
- Feb. 27 Pesticide Safety / Environmental Hazards / Personal Protective Equipment (*Round 1 student presentations, cont.*)
- Mar. 6 FIRST EXAM (mid-term grade will be based on everything to this point)
- Mar. 13 Agriculturally-Related Illnesses; Respiratory Hazards
- March 20 Spring Break**
- Mar. 27 Confined Spaces
- Apr. 3 Fundamental Prevention Strategies in Occupational Safety and Health: Education, Regulation, and Engineering Design – to be covered over three lectures. (*Round 2 student presentations begin.*)
- Apr. 10 Fundamental Prevention Strategies, cont. (*Round 2 student presentations, cont.*)
- Apr. 17 Fundamental Prevention Strategies, cont. (*Round 2 student presentations, cont.*)
- Apr. 24 Hazard Identification and Control on Farms (*Round 2 student presentations, cont.*)
- May 1 AgrAbility Program – Farming with a Disability
- May 8 FINAL EXAM (regular class time, during finals week; a comprehensive exam on entire course)