

1. General Information

1a. Submitted by the College of: AGRICULTURE, FOOD AND ENVIRONMENT

Date Submitted: 3/6/2015

1b. Department/Division: Biosystems & Agr Engineering

1c. Contact Person

Name: Sue E. Nokes

Email: snokes@uky.edu

Phone: 859-218-4328

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Specific Term/Year¹ SP 16

1e. Should this course be a UK Core Course? No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: TSM 370

2c. Full Title: Fundamentals of Occupational Safety and Health

2d. Transcript Title: Fund Occup Safety & Health

2e. Cross-listing:

2f. Meeting Patterns

LECTURE: 3

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 3

2i. Is this course repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

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SENATE COUNCIL

2j. Course Description for Bulletin: Basic principles of occupational safety and health that managers and technologists should know to operate knowledgeably and productively in a business environment. Topics will include the history of occupational safety and health, key laws and government agencies with an emphasis on the Occupational Safety and Health Administration (OSHA), accident/injury causation, safety behavior and psychology, hazard control, system safety, incident investigation, industrial hygiene, risk reduction, ergonomics, fire safety, hazardous materials, and the role of management at various levels. Although the class is not intended to create occupational safety and health professionals (specialists), it will provide important background should an employee of a small company be required to assume occupational safety and health responsibilities as part of larger job responsibilities.

2k. Prerequisites, if any: None

2l. Supplementary Teaching Component:

3. Will this course taught off campus? No

If YES, enter the off campus address:

4. Frequency of Course Offering: Spring,

Will the course be offered every year?: Yes

If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?: Yes

If No, explain:

6. What enrollment (per section per semester) may reasonably be expected?: 15

7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: No

Will it be of interest to a significant number of students outside the degree pgm?: Yes

If Yes, explain: Any student enrolled in the CAFE may minor in TSM, and this course is offered as part of the TSM minor.

8. Check the category most applicable to this course: Traditional – Offered in Corresponding Departments at Universities Elsewhere,

If No, explain:

9. Course Relationship to Program(s).

a. Is this course part of a proposed new program?: Yes

If YES, name the proposed new program: Minor in Technical Systems Management

b. Will this course be a new requirement for ANY program?: No

If YES, list affected programs:

10. Information to be Placed on Syllabus.

a. Is the course 400G or 500?: No

b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached: Yes

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|LGRABAU|Larry J Grabau|TSM 370 NEW College Review|20150306

SIGNATURE|JMETT2|Joanie Eit-Mims|TSM 370 NEW Undergrad Council Review|20151022

New Course Form

<https://myuk.uky.edu/sap/bc/soap/rfc?services=>

[Open in full window to print or save](#)

Generate F

Attachments:

[Browse...](#)

Upload File

	ID	Attachment
Delete	5589	TSM 370 proposed syllabus updated 10-13-15.docx
	First	1 Last

(*denotes required fields)

1. General Information

- a. * Submitted by the College of: Submission Date:
- b. * Department/Division:
- c.
- * Contact Person Name: Email: Phone:
- * Responsible Faculty ID (if different from Contact): Email: Phone:
- d. * Requested Effective Date: Semester following approval OR Specific Term/Year ¹ SP 16
- e.
- Should this course be a UK Core Course? Yes No
- If YES, check the areas that apply:
- Inquiry - Arts & Creativity Composition & Communications - II
- Inquiry - Humanities Quantitative Foundations
- Inquiry - Nat/Math/Phys Sci Statistical Inferential Reasoning
- Inquiry - Social Sciences U.S. Citizenship, Community, Diversity
- Composition & Communications - I Global Dynamics

2. Designation and Description of Proposed Course.

- a. * Will this course also be offered through Distance Learning? Yes ⁴ No
- b. * Prefix and Number:
- c. * Full Title:
- d. Transcript Title (if full title is more than 40 characters):
- e. To be Cross-Listed ² with (Prefix and Number):
- f. * Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours³ for each meeting pattern type.
- | | | | |
|--|--|---------------------------------|---------------------------------|
| <input type="text" value="3"/> Lecture | <input type="text"/> Laboratory ¹ | <input type="text"/> Recitation | <input type="text"/> Discussion |
| <input type="text"/> Indep. Study | <input type="text"/> Clinical | <input type="text"/> Colloquium | <input type="text"/> Practicum |
| <input type="text"/> Research | <input type="text"/> Residency | <input type="text"/> Seminar | <input type="text"/> Studio |
| <input type="text"/> Other | If Other, Please explain: <input type="text"/> | | |
- g. * Identify a grading system:
- Letter (A, B, C, etc.)
- Pass/Fail
- Medicine Numeric Grade (Non-medical students will receive a letter grade)
- Graduate School Grade Scale
- h. * Number of credits:
- i. * Is this course repeatable for additional credit? Yes No
- If YES: Maximum number of credit hours:
- If YES: Will this course allow multiple registrations during the same semester? Yes No

j. * Course Description for Bulletin:

Basic principles of occupational safety and health that managers and technologists should know to operate knowledgeably and productively in a business environment. Topics will include the history of occupational safety and health, key laws and government agencies with an emphasis on the Occupational Safety and Health Administration (OSHA), accident/injury causation, safety behavior and psychology, hazard control, system safety, incident investigation, industrial hygiene, risk reduction, ergonomics, fire safety, hazardous materials, and the role of management at various levels. Although the class is not intended to create occupational safety and health professionals (specialists), it will provide important background should an employee of a small company be required to assume occupational safety and health responsibilities as part of larger job responsibilities.

k. Prerequisites, if any:

None

l. Supplementary teaching component, if any: Community-Based Experience Service Learning Both3. * Will this course be taught off campus? Yes No

If YES, enter the off campus address:

4. Frequency of Course Offering.

a. * Course will be offered (check all that apply): Fall Spring Summer Winter

b. * Will the course be offered every year? Yes No

If No, explain:

5. * Are facilities and personnel necessary for the proposed new course available? Yes No

If No, explain:

6. * What enrollment (per section per semester) may reasonably be expected? 15

7. Anticipated Student Demand.

a. * Will this course serve students primarily within the degree program? Yes No

b. * Will it be of interest to a significant number of students outside the degree pgm? Yes No

If YES, explain:

Any student enrolled in the CAFE may minor in TSM, and this course is offered as part of the TSM minor.

8. * Check the category most applicable to this course:

Traditional – Offered in Corresponding Departments at Universities Elsewhere

Relatively New – Now Being Widely Established

Not Yet Found in Many (or Any) Other Universities

9. Course Relationship to Program(s).

a. * Is this course part of a proposed new program? Yes No

If YES, name the proposed new program:

Minor in Technical Systems Management

b. * Will this course be a new requirement [§] for ANY program? Yes No

If YES [§], list affected programs:

10. Information to be Placed on Syllabus.

a. * Is the course 400G or 500? Yes No

If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in 10.b. You must include: (i) identify additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR

b. * The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable 10.a above) are attached.

[§] Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

[¶] The chair of the cross-listing department must sign off on the Signature Routing Log.

TSM 370 Fundamentals of Occupational Safety and Health (3 credits)

Instructor: Dr. Mark Purschwitz, Rm 109 CE Barnhart Building, purschwitz@uky.edu

Class Times and Location: Tuesday-Thursday 12:30 – 1:45 p.m., Rm. 236 CE Barnhart Building

Instructor Contact Information:

Mark A. Purschwitz, Ph.D.

Dept. of Biosystems and Agricultural Engineering

Rm. 109 C.E. Barnhart Building

Email: purschwitz@uky.edu (preferred contact method)

Phone: 859-257-3764

Office hours: Whenever I am in my office; by appointment (very flexible); always available via email

Course Description:

This course will cover basic principles of occupational safety and health that managers and technologists should know to operate knowledgeably and productively in a business environment. Topics will include the history of occupational safety and health, key laws and government agencies with an emphasis on the Occupational Safety and Health Administration (OSHA), accident/injury causation, safety behavior and psychology, hazard control, system safety, incident investigation, industrial hygiene, risk reduction, ergonomics, fire safety, hazardous materials, and the role of management at various levels.

Prerequisite: Enrollment in the TSM Minor or consent of the instructor.

Course Goal and Objectives:

Although the course is not intended to create specialized occupational safety and health managers (which generally requires a degree in occupational safety and health), the goal of the course is to prepare managers of technical systems to interact with occupational safety and health professionals on the job. More specifically, the objectives are to enable students to understand the basic principles of occupational safety and health, to understand the terminology, and understand how occupational safety and health fits into employer responsibilities. This understanding will enable intelligent and productive communication with other managers.

Student Learning Outcomes:

Students completing this course will be able to:

- Explain the moral, financial, and legal reasons for a company to invest time and resources in occupational safety and health.
- Describe the organization, functions, and actions of OSHA.
- List the major OSHA standards and explain their requirements.
- Explain the OSHA General Duty Clause and its application.
- Demonstrate application of OSHA standards to a variety of workplace situations.
- List the major safety-related business laws and explain them.
- Explain the workers' compensation system
- Explain product liability and classify various scenarios into defensible and potentially indefensible positions
- Define risk and analyze risk in various situations
- Explain, compare, and contrast major theories of accident causation including their strengths and weaknesses.
- Explain proper incident investigation procedures, analyze information, and reach a conclusion.
- Classify accident/injury prevention measures as passive or active techniques.
- Explain the differences between prevention by behavioral means and by hazard control.

- Analyze prevention techniques for overlap/interaction between behavior change and hazard control.
- Describe the key techniques used to analyze system safety and explain their application.
- Explain industrial hygiene and the function of industrial hygienists.
- Explain ergonomics and its applications to a variety of work settings.
- Distinguish between acute and chronic injury and disease.
- Classify hazards with regard to acute and chronic, traumatic and musculoskeletal injury.
- Describe the basics of fire prevention and the handling of hazardous materials.
- Explain the role of management at a variety of levels in the conduct of operations in an occupationally safe and healthy manner.

Homework: Homework will consist of weekly assigned readings from the text, plus ten written assignments of approximately 10-12 short answer and fill-in-the-blank questions based on the readings. The readings and written assignments are designed to reinforce the lectures. Students will have one week to complete each assignment; late homework will be docked 20% up until the start of the next class, then docked 50%. As described below, homework accounts for 30% of the grade, and each homework assignment will be weighted equally, making each assignment worth three percent of the grade.

Grading: Grades will be assigned on a straight 10-percentage-point scale basis: A = 90%+; B = 80-89.9%; C = 70-79.9%; D = 60-69.9%; E = 60% or less. Final grades will be based on the following distribution: homework 30%, two midterm exams 30%; final exam 30%, term project 10%.

Schedule of Lectures:

Week	Topics	Homework
1	Introduction to occupational safety and health and its importance.	
2	History of occupational safety and health; legislative history.	#1 assigned
2	OSHA and how it functions	
3	OSHA standards	#1 due; #2 assigned
3	OSHA standards, cont.	
4	Workers' compensation system	#2 due; #3 assigned
4	Safety-related business law	
5	Product liability	#3 due
5	Midterm Exam #1	
6	Hazards vs. risk	#4 assigned
6	Theories of accident causation	
7	Theories of accident causation, cont.	#4 due; #5 assigned
7	Incident investigation	
8	Psychology and safety – the human element	#5 due; #6 assigned
8	Psychology and safety, cont.	
9	System safety	#6 due; #7 assigned
9	System safety, cont.	
10	System safety, cont.	#7 due
10	Exam #2	
11	Ergonomics	#8 assigned
11	Ergonomics, cont.	

12	Industrial hygiene	#8 due; #9 assigned
12	Fire prevention	
13	Required written programs	#9 due; #10 assigned
13	Roles/responsibilities of businesses and management	
14	Roles/responsibilities of businesses and management, cont.	#10 due; term project due
14	Semester summary and review	
15	Final exam	

Text: Fundamentals of Occupational Safety and Health, Sixth Edition by Mark A. Friend and James P. Kohn. Bernan Press, c2014.

Term Project: Students will be required to earn their “OSHA 10-Hour Card”, which is a specific and official OSHA designation for classes offered by OSHA-authorized trainers in the OSHA Outreach Training Program. A 30-hour card is also available but is more costly and intended more for people with specific safety responsibilities in their companies. Both cards are universally recognized by industry, and having a card is something to put on your resume. The 10-hour card is available online from authorized vendors, is offered in several versions (including general industry, general industry-agriculture, and construction) and should cost students between \$25 and \$35 dollars. Earning a card will reinforce the material taught in TSM 370. Proof that the card has been earned can be given to me at any time, and is required no later than the week before the final exam.

The 10-hour card is awarded by the authorized trainer on a pass-fail basis. Either you complete the training and earn the card or you don't, just as if an employer required you to earn the card. This training is designed for entry-level workers, and tens of thousands of them earn these cards every year, so it is well within the capabilities of any college student. If you earn the card, you get full course credit (10% of your grade); if you do not earn the card, you get zero credit.

Classroom conduct: Cell phones should be silent (no talking or texting) during class and recitation periods. Handouts are typically distributed at the beginning of class. If you are late to class, it is your responsibility to come to the front of the class and pick up handouts, if you miss a day it is your responsibility to have another student get a copy of the handout for you.

Cheating and Plagiarism: Please be sure that you only turn in work that is your own, whether it is homework, a case study, or exam. If you're unsure about what constitutes cheating, please see me.

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>)

Attendance Policy: Attendance: Acceptable reasons for excused absences are given below. It is the responsibility of the student to notify the instructor as soon as the student knows that an excused absence will be necessary, and also to provide proof that the absence conforms to the University's policy.

Penalties for unexcused absences are as follows:

1-2 unexcused absences – no reduction in semester percentage points that determine your grade

3-4 unexcused absences – loss of five percentage points (e.g., from 92 down to 87)

5-6 unexcused absences – loss of ten percentage points

7+ unexcused absences – University guidelines suggest you drop the course

Excused Absences:

Students need to notify the professor of absences prior to class when possible. Senate Rules 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. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud (859-257-3737, http://www.uky.edu/Ombud/ForStudents_ExcusedAbsences.php).

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

Per Senate Rule 5.2.4.2, students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The professor must give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

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 (<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. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. Their web address is <http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/>.

Emergencies:

If an emergency arises in this classroom, building or vicinity, your instructor will advise you of actions to follow to enhance your safety. If a situation requires emergency shelter (i.e., during a severe weather event), the nearest shelter location is <insert location here>. If building evacuation occurs (i.e., fire alarm), follow posted evacuation routes and assemble at <insert the evacuation location> so the instructor can help ensure their students have evacuated the building safely and they are not hindering emergency personnel access to the building. If you may require assistance during an emergency, notify the instructor at the beginning of the semester. In order to prepare for emergencies while on campus please continue to

the below links for detailed emergency response guidelines: the UK Division of Crisis Management & Preparedness website (<http://www.uky.edu/EM/emergency-response-guide.html>) and the College of Agriculture, Food and Environment (<http://www.ca.uky.edu/>). To receive emergency messages, sign up for UK Alert (<http://www.uky.edu/EM/UKAlert>). Always turn cellular phones to silent mode when entering the classroom. If you observe or receive an emergency alert, immediately and calmly inform your instructor.

Updated 10-13-15