



**MEMORANDUM**

**TO: Health Care Colleges Council**

**FROM: William G. Pfeifle, EdD**  
**Associate Dean for Academic Affairs**

A handwritten signature in black ink, appearing to read 'William G. Pfeifle'.

**SUBJECT: Change Proposal for CPH 620**

**DATE: April 18, 2011**

The Department of Preventive Medicine and Environmental Health has submitted a course change proposal for CPH 620 Occupational and Environmental Health II to change the course from 4 to 3 credit hours and to drop the cross-listing of PM 602.

This course change proposal has been reviewed and approved by the Academic Affairs Committee and the Faculty Council, according to our college's established bylaws.

Further information about this course can be obtained by contacting the Chair of Preventive Medicine and Environmental Health, Dr. Robert McKnight, via phone at 218-2100 or via email at [rhmckn1@uky.edu](mailto:rhmckn1@uky.edu).

M E M O R A N D U M

TO: William Pfeifle, EdD  
Associate Dean for Academic Affairs

FROM: Graham D. Rowles, PhD  
Chair, Faculty Council

SUBJECT: Approval – Course Change Proposal for CPH 620

DATE: April 20, 2010

At its meeting today, the Faculty Council approved the following course change proposal:

CPH 620 Occupational and Environmental Health II (Change from 4 credit hours to 3; drop cross listing with PM 602)

This is now ready to proceed to the next stage of the approval process. Please do not hesitate to contact me if you need additional information or clarification.

# MEMO

**DATE: March 2, 2010**

TO: Associate Dean for Academic Affairs

FROM: Chair, Academic Affairs Committee

SUBJECT: Course Change Approval

CPH 620 Occupational & Environmental Health II

Change from 4 to 3 credit hours  
Drop PM 602 cross listing

# COURSE CHANGE FORM

Complete 1a – 1f & 2a – 2c. Fill out the remainder of the form as applicable for items being changed.

<b>1. General Information</b>					
a.	Submitted by the College of: Public Health	Today's Date:	2/18/2010		
b.	Department/Division: Preventive Medicine				
c.	Is there a change in "ownership" of the course?		YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	
	If YES, what college/department will offer the course instead?				
d.	What type of change is being proposed?		<input checked="" type="checkbox"/> Major	<input type="checkbox"/> Minor <sup>1</sup>	
e.	Contact Person Name: Robert McKnight	Email: rhmckn1@uky.edu	Phone: 218-2100		
f.	Requested Effective Date: <input type="checkbox"/> Semester Following Approval		OR	<input checked="" type="checkbox"/> Specific Term <sup>2</sup> : Fall 2011	
<b>2. Designation and Description of Proposed Course</b>					
a.	<b>Current Prefix and Number:</b> CPH 620	<b>Proposed Prefix &amp; Number:</b>		CPH 620	
b.	<b>Full Title:</b> Occupational & Environmental Health II	<b>Proposed Title:</b>		Occupational & Environmental Health II	
c.	<b>Current Transcript Title</b> (if full title is more than 40 characters):				
c.	<i>Proposed Transcript Title</i> (if full title is more than 40 characters):				
d.	<b>Current Cross-listing:</b> <input type="checkbox"/> N/A	OR	<b>Currently Cross-listed with (Prefix &amp; Number):</b> PM 602		
	<i>Proposed - <input type="checkbox"/> ADD Cross-listing (Prefix &amp; Number):</i>				
	<i>Proposed - <input checked="" type="checkbox"/> Remove<sup>3,4</sup> Cross-listing (Prefix &amp; Number):</i> PM 602				
e.	<b>Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours<sup>5</sup> for each meeting and pattern type.</b>				
Current:	60 Lecture	Laboratory <sup>5</sup>	Recitation	Discussion	Indep. Study
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other – Please explain: <span style="background-color: #cccccc; padding: 2px;"> </span>		
Proposed:	45 Lecture	Laboratory	Recitation	Discussion	Indep. Study
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other – Please explain:		
f.	<b>Current Grading System:</b> <input checked="" type="checkbox"/> Letter (A, B, C, etc.)		<input type="checkbox"/> Pass/Fail		
	<i>Proposed Grading System:</i> <input checked="" type="checkbox"/> Letter (A, B, C, etc.)		<input type="checkbox"/> Pass/Fail		
g.	<b>Current number of credit hours:</b> 4	<b>Proposed number of credit hours:</b>		3	

<sup>1</sup>See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair.* If Chair deems the change as "not minor," the form will be sent to appropriate Council for normal processing and contact person is informed.

<sup>2</sup>Courses are typically made effective for the semester following approval. No course will be made effective until all approval are received.

<sup>3</sup>Signature of the chair of the cross-listing department is required on the Signature Routing Log.

<sup>4</sup>Removing a cross-listing does not drop the other course – it merely unlinks the two courses.

<sup>5</sup>Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting. Lab meeting generally represents at least two hrs per wk for a semester for 1 credit hour. (See SR 5.2.1)

## COURSE CHANGE FORM

<b>h.</b>	<b>Currently, is this course repeatable for additional credit?</b>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	<i>Proposed to be repeatable for additional credit?</i>	YES <input type="checkbox"/>	NO <input type="checkbox"/>
	<i>If YES: Maximum number of credit hours:</i>		
	<i>If YES: Will this course allow multiple registrations during the same semester?</i>	YES <input type="checkbox"/>	NO <input type="checkbox"/>
<b>i.</b>	<b>Current Course Description for Bulletin:</b>	No changes in bulletin description	
	<i>Proposed Course Description for Bulletin:</i>		
<b>j.</b>	<b>Current Prerequisites, if any:</b>	CPH 601	
	<i>Proposed Prerequisites, if any:</i>	CPH 601	
<b>k.</b>	Current Distance Learning (DL) Status:	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Already approved for DL* <input type="checkbox"/> Please Add <sup>6</sup> <input type="checkbox"/> Please Drop	
	*If already approved for DL, the Distance Learning Form must also be submitted <u>unless</u> the department affirms (by checking this box <input type="checkbox"/> ) that the proposed changes do not affect DL delivery.		
<b>l.</b>	<b>Current Supplementary Teaching Component, if any:</b>	<input type="checkbox"/> Community-Based Experience <input type="checkbox"/> Service Learning <input type="checkbox"/> Both	
	<i>Current Supplementary Teaching Component, if any:</i>	<input type="checkbox"/> Community-Based Experience <input type="checkbox"/> Service Learning <input type="checkbox"/> Both	
<b>3.</b>	<b>Currently, is this course taught off campus?</b>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	<i>Proposed to be taught off campus?</i>	YES <input type="checkbox"/>	NO <input type="checkbox"/>
<b>4.</b>	<b>Are significant changes in content/teaching objectives of the course being proposed?</b>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES, explain and offer brief rationale:		
<b>5.</b>	<b>Course Relationship to Program(s)</b>		
<b>a.</b>	<b>Are there other departments and/or programs that could be affected by the proposed change?</b>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES, identify the departments and/or programs:		
<b>b.</b>	<b>Will modifying this course result in a new requirement<sup>7</sup> for ANY program?</b>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES <sup>7</sup> , list the program(s) here:		
<b>6.</b>	<b>Information to be Placed on Syllabus.</b>		
<b>a.</b>	<input type="checkbox"/> Check box if <u>Changed to</u> 400G or 500	If <u>changed to</u> 400G-or 500-level course you must send in a syllabus and <i>you must include the differentiation</i> between undergraduate and graduate students by: (i) requiring additional assignments by the graduate students; and/or (ii) establishing different grading criteria in the course for graduate students. (See SR 3.1.4)	

<sup>6</sup>You must *also* submit the Distance Learning Form in order for the course to be considered for DL delivery.

<sup>7</sup>In order to change a program, a program change form must also be submitted.

# COURSE CHANGE FORM

## Signature Routing Log

**General Information:**

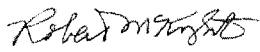
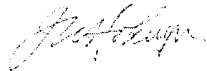


Course Prefix and Number: CPH 620

Proposal Contact Person Name: Robert McKnight Phone: 218-2100 Email: rhmcn1@uky.edu  
Becki Flanagan Phone: 218-2092 Email: becki@uky.edu

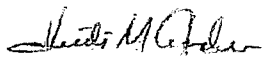
**INSTRUCTIONS:**

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

**Internal College Approvals and Course Cross-listing Approvals:**

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
Department of Preventive Medicine and Environmental Health	2-19-2010	Robert McKnight/218-2100/rmcknig@uky.edu	
Academic Affairs Committee	3-2-2010	Jim Holsinger/323-6314/jwh@email.uky.edu	
Faculty Council	4-20-2010	Graham Rowles/218-0145/growl2@email.uky.edu	
Academic Dean	4-18-2011	William Pfeifle/218-2054/pfeifle@uky.edu	

**External-to-College Approvals:**

Council	Date Approved	Signature	Approval of Revision <sup>6</sup>
Undergraduate Council			
Graduate Council			
Health Care Colleges Council	5/17/11		
Senate Council Approval		University Senate Approval	

**Comments:**

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<sup>6</sup> Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

**UNIVERSITY OF KENTUCKY**  
**COLLEGE OF PUBLIC HEALTH**

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**Spring 2012**  
**Wednesdays 9:00 am to 11:30 am Room TBA**

**Course Syllabus**  
**CPH 620 - Occupational and Environmental Health II**  
**3 Credit Hours**

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**Contact information**

Instructor: Scott Prince, MD, MSPH  
Telephone: 218-2100  
E-mail: [tprince@uky.edu](mailto:tprince@uky.edu)  
Office : CPH 220  
Office Hours : Office hours by Apointment

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**Course description**

CPH 620 addresses advanced theories and practices of identifying, assessing, and controlling occupational and environmental hazards that may adversely affect the health of communities and working populations. The course emphasizes harmful effects of non-chemical hazards, such as radiation, noise, hypoxia, and physical agents that lead to morbidity and mortality. However, evaluation and control measures will cover many types of hazardous exposures, including those from chemical exposures.

Credit- 3 semester hours

**Course prerequisites**

CPH 601 Occupational and Environmental Health I

**Course objectives**

Upon completion of this course, the learner will:

1. Understand basic principles and methods of public health practice concerning *Anticipation, Recognition, Evaluation and Control* of hazards to health and safety, along with the promotion of positive population health and safety attributes.

2. Evaluate a broad scope of occupational and environmental health issues and practices including a sound understanding of the behavior of physical, chemical, biological and ergonomic hazards, routes of exposure, hazard evaluation, exposure assessments, the use of engineering methods, administrative changes, behavioral modification and the use of personal protective equipment as exposure controls.
3. Conduct a walkthrough exposure evaluation survey and recommend actions to improve the health and safety of those exposed.

### **College of Public Health objectives in environmental health**

This course relates directly to the accomplishment of the educational program goals for the M.P.H., which is described in the most current student handbook. It is one of the required area courses in environmental health. Please refer to the educational program goals throughout the semester, as they will provide a framework for this course and will contribute to your preparation for successfully completing other degree program requirements.

### **Public Health Competencies for environmental and occupational health**

The last pages of this document indicate Competencies/Terminal Objectives of CPH 620 relevant to the College of Public Health terminal objectives in environmental health.

### **Textbook**

Salvatore DiNardi (ed). The Occupational Environment: Its Evaluation, Control, and Management, Second Edition, AIHA (American Industrial Hygiene Association) Press, 2003.

### **Course requirements and learner evaluation**

Course grades will be based upon evaluation of the following activities:

1. Regulatory review write-up and presentation: Students will review a regulatory limit in place for one hazardous exposure and prepare a summary paper (25%) on the scientific basis of the limit. The focus of this paper should be on whether the value selected is supported by the literature cited in the supporting documentation. Would you be willing to be exposed at such a limit? Limits could come from the EPA, NIOSH/ OSHA, or another group. The paper should be no more than 2 typewritten pages (single-spaced, Arial font 12 size) in length and should demonstrate that the student has read and critically analyzed the original experimental animal studies and human exposure data that served as the basis for the limit. This paper will be presented to the class in a brief oral presentation (5%).
2. Calculation assignments (2 at 5% each): There are two homework assignments on exposure assessment. These will cover basic calculations in gas, particle, noise and radiation. Examples will be provided. Similar exercise questions will appear on the final exam. Therefore you need to learn to do the calculations yourself.



3. One hazard survey will be conducted during the course (15%). Students will write a report on the site visit. You are expected to describe the site and routes of potential exposures, explain potential hazards you identified during the visits and make recommendations for exposure control. More details on the survey and report will be covered in class.
4. Brief, in-class quizzes, calculations, and presentation/discussion of the readings (15%).
5. There will be a final, cumulative examination (30%).

Grading:

1. In Class Quizzes / Projects / Discussion	15%
2. Two calculation assignments	10%
3. Review paper / presentation	30%
4. Hazard survey	15%
5. Final exam	30%

Grading criteria

100-90 = A  
 89-80 = B  
 79-70 = C  
 69-0=E

**Class Participation**

Attend every class session. Class attendance is required, and highly recommended if you want to succeed in this course. The attendance of field trips is a must. The reasons are that 1) you will benefit from class participation and interaction with the instructor, invited speakers and your classmates; 2) some lectures only have real slides and no PowerPoint slides and therefore it is difficult to understand what is covered in class in those lectures if you miss them; 3) the exam questions are mostly from the lectures presented in class whereas the textbook is used as a reference to broaden the views of the student; 4) field trips are the real-world chance you can observe the hazards. Such visits are hard to make up for you. Without your own observation, you may not be able to obtain the firsthand data to write your report and make proper control recommendations.

**Instructor expectations**

1. Discuss the selection of a hazardous exposure with the instructor early in the semester so you will have time to prepare your review of the documentation and the class presentation.
2. Complete assignments on time. Assignments are due in one week.
3. Arrive on time for class and field trip. The tour will not wait for you.
4. Stay for the entire class.
5. For excused absence and emergencies that prevent the student from attending the class, the student is expected to email or call the instructor as soon as possible.

6. Read assigned materials (book chapters, reference papers and lecture slides) in advance of lectures and be prepared to ask questions and actively participate in class discussions.
7. Show common courtesy to others; don't chatter, eat, drink, or be a general nuisance.
8. Turn off cell-phones and beepers.
9. Consult the instructor if any questions arise.
10. Conduct yourself professionally.
11. You are encouraged to provide honest and timely feedback regarding the content and process of this course throughout the semester.

### **Academic honesty**

Academic honesty is highly valued at the University. You must always submit work that represents your original words or ideas. If any words or ideas used in a class assignment submission do not represent your original words or ideas, you must cite all relevant sources and make clear the extent to which such sources were used. Words or ideas that require citation include, but are not limited to, all hard copy or electronic publications, whether copyrighted or not, and all verbal or visual communication when the content of such communication clearly originates from an identifiable source. Please see the University's policies concerning the consequences for plagiarism (<http://www.uky.edu/StudentAffairs/Code/> and <http://www.uky.edu/USC/Section.VI.pdf>).

### **Accommodations**

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, submit to me a Letter of Accommodation from the Disability Resource Center ([www.uky.edu/TLC/grants/uk\\_ed/services/drc.html](http://www.uky.edu/TLC/grants/uk_ed/services/drc.html)). If you have not already done so, please register with the Disability Resource Center for coordination of campus disability services available to students with disabilities.

### **Inclement weather**

The University of Kentucky has a detailed policy for decisions to close in inclement weather. The snow policy is described in detail at [http://www.uky.edu/PR/News/severe\\_weather.htm](http://www.uky.edu/PR/News/severe_weather.htm) or you can call (859) 257-5684. In general, the University is not closed for severe weather, but the instructor may decide to cancel the class, in which case, he will contact you via e-mail (or cell phone) and let you know before the class begins.

### **Excused absences – per (Senate Rule 5.2.4.2)**

Students are expected to attend each class meeting unless he or she has been excused by the instructor. Failure to attend class will result in a lower grade, and may result in failing the class. Absences due to illness or emergencies must be reported within a week. You may call the instructor's office or email him at the numbers/address listed on the first page of this syllabus.

When there is an excused absence, students will be given the opportunity to make up missed work and/or exams.

The following are typically accepted reasons for excused absences:

1. Serious illness.
2. Illness or death of a family member.
3. Approved University-related trips.
4. Major religious holidays.
5. Other circumstances found to be "reasonable cause for nonattendance."

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 for adding a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (257-2754).

### **Unexcused absences**

A student who has unexcused absences in excess of five 2-hour classes will receive a failing grade for the course without regard for points earned through completed assignments. No make-up opportunities will be given for unexcused absences.

### **Make-up exam**

Students are expected to take exam at the times scheduled in the syllabus. Possible exceptions include verified serious illness, serious family emergency, subpoenas, jury duty, military service, religious observances, or a legitimate conflict with recognized University activities. If these apply, you must contact instructors to request a makeup. Make these arrangements as soon as you know of the conflict--BEFORE the exam. No make-up for assignment is allowed.

### **Incompletes**

An incomplete grade due to illness or other emergencies may be arranged. A request for an incomplete due to illness must be accompanied by a letter from your doctor, the Student Health Service, or a hospital. Lack of time to complete assigned work, or other reasons not relating to unavoidable excused absences, will not be accepted as a valid reason for petitioning for an incomplete. No incompletes will be given unless you have a prior written agreement with the instructor BEFORE the end of classes.

### **Course schedule and topics**

See the next page. Several topics are taught by guest faculty with extensive experience in the area covered. Due to the invited speakers involved and their other commitments, the schedule may change during the semester. We will try to announce the change one week in advance if possible.

*CPH 620 - Spring Semester 2012*

*Schedule as of August 26, 2011*

<b>No</b>	<b>Date</b>	<b>Topic</b>	<b>Book chapters*</b>
1		Course overview / History of Occupational and Environmental Health Policy	1,3,4
2		Routes of Exposure / Methods of Exposure Control	6,17,32,35
3		Exposure Assessment / Biological Monitoring	7,8,9,16,41
4		Sampling, Analysis, and Sources of Exposure Data	10,11,42
5		Physical agents: radiation and heat / cold	22,23,24
6		Physical agent: noise and repetitive trauma	21,27,28
7		Injury and Behavioral Health Interventions	5,48
8		Spring Break	
9		Sources of Environmental Information/ Workers' Compensation	Handouts
10		Inhalation Injury / Environmental Pulmonary Disease	Handouts
11		Site Visit / Assessment	
13		Biohazards	19,45
14		Student Presentations – Paper Due	
15		Artificial Environments / Indoor Air Quality	20,34,43
16		Final Exam	

\* There will frequently be additional readings (handouts or journal articles). These will be provided at least one week in advance.

## Competencies/Terminal Objectives – CPH 620 Occupational and Environmental Health II

MPH Educational Program Goals – Acquire skills and experience in the application of specialty knowledge to the solution of community health problems.

Objectives		Outcomes
1	Identification and Evaluation of Environmental Health Hazards	
	Recognize and evaluate basic occupational exposures and hazards	Effectively communicate the potential for health effects of chemical exposures Analyze sources of potentially hazardous physical exposures, including ergonomics, temperature, pressure, and radiation Identify potentially hazardous biologic exposures
	Demonstrate an understanding of health effects that are commonly related to occupational exposures.	Characterize the potential relationship between symptoms / illnesses and occupational exposures
	Determine the nature and extent of potential occupational exposures, considering routes of exposure and routes of absorption	For potentially affected populations, identify the nature, extent, and routes of exposures.
	Evaluate populations whose health may be affected by acute or chronic contact with occupational hazards	Adequately assess clinical and environmental data, along with literature reviews if applicable Evaluate the severity of exposure to hazardous agents, including dose-response relationships and other toxicological data Determine populations with conditions that increase risk from the effects of exposure to chemical, physical, or biological agents.
	Characterize populations to identify target exposures, risk factors, and/or conditions of concern	Describe the appropriate use and limitations of screening for well populations and the applications of screening assessment and early intervention for target audience high risk groups
	Interpret and apply OSHA permissible exposure limits, the ACGIH threshold limit values and biological exposure indices, EPA standards, and other applicable criteria	Apply appropriate regulations and guidelines when evaluating a potential occupational hazard
2	Reduce environmental health hazards	
	Describe preventive measures for chemical, physical, and biological health hazards.	Utilize appropriate levels of preventive measures.
	Advise groups about health risks and lifestyle	Appropriate, culturally-sensitive recommendations for reducing risk and improving health
3	Communication / Integration	

	Demonstrate an understanding of the roles of administrators, other medical professionals, industrial hygienists, environmental engineers, and safety personnel, demonstrating an understanding of their roles in occupational health.	Work with different health and administrative professionals as needed at practicum sites to complete the goals and objectives of the practicum.
	Communicate to a target audience in a clear and effective manner both orally and in writing, the levels of risk from real or potential hazards and the rationale for selected interventions	Evaluate guidelines for a specific chemical in class with descriptions of risk and control measures for that chemical Communicate to industrial/environmental audiences the hazards associated with a particular exposure
4	Occupational Health Laws, Regulations, Government Agencies, and other organizations	
	Be familiar with basic occupational and environmental health and safety regulations.	Explain and appropriately utilize the primary sections of the following legislation: EPA, OSHA
5	Ethical Issues in EH	
	Understand the basic rights of a citizen/group requesting assistance/information from a government agency regarding environmental health	Explain the rights of an employee or citizen in requesting information/ assistance from a government agency regarding environmental health issues.
	Identify and understand ethical dilemmas in the environmental health.	Report all findings to affected individuals and pertinent information to government organizations as appropriate