

# NEW COURSE PROPOSAL

**Courses must be submitted by November 2, 2009, for priority catalog review.**

DATE (*Change if modified and redate file with current date*) 8-18-2010; REV 11.8.10

PROGRAM AREA(S) HEALTH SCIENCE

**1. Course Information.** *[Follow accepted catalog format.]*

**Prefix(es)** (Add additional prefixes if cross-listed) **and Course No.** HLTH 303

**Title:** PHARMACOLOGY AND AGING ADULTS **Units:** 3

x Prerequisites HLTH 100, CHEM 110 and BIOL 305

Corequisites

Consent of Instructor Required for Enrollment

**Catalog Description** (Do not use any symbols): Provides comprehensive information on analysis of major drug groups, the disorders they treat, and the age-associated changes in cellular processes that affect drug action to assist health care professionals in diagnosing and managing common geriatric conditions effectively and safely. Topics also include future research problems dealing with the expanding aging population, their drug usage, and the problem of adverse drug reactions.

**Grading Scheme:**

x A-F Grades

Credit/No Credit  
Optional (Student Choice)

**Repeatability:**

Repeatable for a maximum of units

Total Completions Allowed  
Multiple Enrollment in Same Semester

**Course Level Information:**

x Undergraduate

Post-Baccalaureate/Credential  
Graduate

**Mode of Instruction/Components** (*Hours per Unit are defaulted*).

	Units	Hours per Unit	Benchmark Enrollment	Graded Component	CS & HEGIS # (Filled in by the Dean)
Lecture	3	1	30	x	
Seminar		1			
Laboratory		3			
Activity		2			
Field Studies					
Indep Study					
Other Blank					

Leave the following hours per week areas blank. The hours per week will be filled out for you.

3 hours lecture per week  
hours blank per week

**2. Course Attributes:**

**General Education Categories:** All courses with GE category notations (including deletions) must be submitted to the GE website: <http://summit.csuci.edu/geapproval>. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

**A (English Language, Communication, Critical Thinking)**

- A-1 Oral Communication
- A-2 English Writing
- A-3 Critical Thinking

**B (Mathematics, Sciences & Technology)**

- B-1 Physical Sciences
- B-2 Life Sciences – Biology
- B-3 Mathematics – Mathematics and Applications
- B-4 Computers and Information Technology

**C (Fine Arts, Literature, Languages & Cultures)**

- C-1 Art

C-2 Literature Courses

C-3a Language

C-3b Multicultural

**D (Social Perspectives)**

**E (Human Psychological and Physiological Perspectives)**

**UDIGE/INTD Interdisciplinary**

**Meets University Writing Requirement**

**Meets University Language Requirement**

**American Institutions, Title V Section 40404:**  Government  US Constitution  US History

Refer to website, Exec Order 405, for more information: <http://senate.csuci.edu/comm/curriculum/resources.htm>

**Service Learning Course** (Approval from the Center for Community Engagement must be received before you can request this course attribute).

- 3. Justification and Requirements for the Course.** (Make a brief statement to justify the need for the course)
- A. Justification: This is a required course for the BS in Health Science major with an Emphasis in Gerontology. As adaptive capacities decline, and disease increases, the elderly become major consumers of drugs. Because of the special needs of older patients, it is essential for health care providers and researchers to learn how the aging process changes the pharmacokinetic and pharmacodynamic properties of drugs prescribed to the elderly.
- B. Degree Requirement:  Requirement for the Major/Minor **Note: Submit Program Modification if this course changes your program.**  
 Elective for the Major/Minor  
 Free Elective
- 4. Learning Objectives.** (List in numerical order. You may wish to use the following resource in utilizing measurable verbs: <http://senate.csuci.edu/comm/curriculum/resources.htm>)  
Upon completion of the course, the student will be able to:  
Identify major groups of drugs used in the aging population;  
Explain the pharmacokinetic and pharmacodynamic properties of drugs prescribed to the elderly;  
Describe age-associated changes in cellular processes that affect drug action;  
Apply conceptual knowledge from this course in evaluating drugs used in the aging population.
- 5. Course Content in Outline Form.** [Be as brief as possible, but use as much space as necessary]

Pharmacokinetics

Adrenergic function in aging: Focusing on the cardiovascular system

Cholinergic regulation of heart function in aging

Antihypertensive and vasodilator drugs in aging

Antiarrhythmic drugs affecting myocardial excitability

Use of diuretic agents in the elderly

The effect of age on bronchodilators used to treat asthma

Sedative, hypnotics, alcohol, and anticonvulsants

Parkinson's Disease and aging: Pharmacological approaches

Antipsychotic drugs

Pharmacology of antidepressants in the elderly

Therapeutics for treating Alzheimer's Disease

Agents used in coagulation disorders of the elderly

Antihyperlipidemic agents

Use of antibacterial agents in aging patients

Pharmacological effects of cancer chemotherapeutic and immunotherapeutic agents on elderly

Nonsteroidal anti-inflammatory drugs

Aging population, their drug usage, and increasing adverse drug reactions

Does this course content overlap with a course offered in your academic program? **Yes**  **No**

If YES, what course(s) and provide a justification of the overlap.

Does this course content overlap a course offered in another academic area? **Yes**  **No**

If YES, what course(s) and provide a justification of the overlap.

Overlapping courses require Chairs' signatures.

**6. Cross-listed Courses** (Please note each prefix in item No. 1)

**A.** List Cross-listed Courses (Signature of Academic Chair(s) of the other academic area(s) is required).

List each cross-listed prefix for the course:

**B.** Program responsible for staffing: Health Science

**7. References.** [Provide 3 - 5 references]

Handbook of Pharmacology of Aging: Second Edition (Pharmacology and Toxicology). Jay Roberts (Editor), Eitan Friedman (Editor) Publisher: CRC-Press; 2nd edition (October 14, 1996), ISBN-10: 0849383064

Prescribing for Elderly Patients. Stephen Jackson (Editor), Paul Jansen (Editor), Arduino Mangoni (Editor) Publisher: Wiley; 1 edition (July 20, 2009). ISBN-10: 0470024283

Little Black Book of Geriatrics. Karen (Author), M.D. Gershman (Author) Publisher: Jones & Bartlett Publishers; 4 edition (July 22, 2008). ISBN-10: 0763757713

**8. Tenure Track Faculty Qualified to Teach This Course.**

Health Science faculty

**9. Requested Effective Date:**

First semester offered: F2013

**10. New Resources Requested. Yes**  **No**

If YES, list the resources needed.

A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)

B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)

x

C. Facility/Space/Transportation Needs

[Redacted]

D. Lab Fee Requested (please refer to Dean's Office for additional processing) Yes [Redacted] No x

E. Other

[Redacted]

11. Will this new course alter any degree, credential, certificate, or minor in your program? Yes [Redacted] No x

If, YES attach a program update or program modification form for all programs affected.

Priority deadline for New Minors and Programs: October 5, 2009 of preceding year.

Priority deadline for Course Proposals and Modifications: November 2, 2009, of preceding year.

Last day to submit forms to be considered during the current academic year: April 15<sup>th</sup>.

Ching-Hua Wang

8-18-2010

Proposer of Course (Type in name. Signatures will be collected after Curriculum approval)

Date

# Approval Sheet

**Program/Course:**

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

Program Chair		
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Signature

Date

Program Chair		
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Signature

Date

Program Chair		
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Signature

Date

General Education Chair		
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Signature

Date

Center for International Affairs Director		
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Signature

Date

Center for Integrative Studies Director		
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Signature

Date

Center for Multicultural Engagement Director		
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Signature

Date

Center for Civic Engagement Director		
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Signature

Date

Curriculum Chair		
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Signature

Date

Dean of Faculty		
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Signature

Date