1. Type of Action
   - A. Addition
   - B. Deletion
   - C. Modification: in credits, in title, in number or alpha, in prerequisites or co-requisites, Other.

2. New Alpha, Number and Title
   PHRM 203 General Pharmacology
   Credits: 3

3. Old Alpha, Number and Title

4. New Catalog Description
   Covers a wide range of drugs with emphasis on sites and mechanism of action, toxicity, fate and uses of major therapeutic agents. This course is intended for students in nursing and allied health fields.

5. Student Contact Hours Per Week
   - Lecture 3
   - Lecture/Lab
   - Lab

6. Select box and type specific information in text box.
   - Prerequisites
   - Corequisites
   - Recommended Preparation
   - "C" or better in ZOOL 141, ZOOL 142, Chem 152 or equivalents.

7. Proposed Date of First Offering
   - Semester: Spring
   - Year: 2007

8. This course is proposed for the Liberal Arts Program. It can fulfill AA Elective. If Other, specify

9. This course Makes No Difference in the number of credits required for the program/core.

10. Equivalent or similar courses offered in the UH System:

<table>
<thead>
<tr>
<th>Campus</th>
<th>Alpha, Number, Title</th>
<th>Campus</th>
<th>Alpha, Number, Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UH Manoa</td>
<td>PHRM 203, General Pharmacology</td>
<td>UH Hilo</td>
<td>NURS 203, General Pharmacology</td>
</tr>
<tr>
<td>HawaiiCC</td>
<td>PHRM 203, General Pharmacology</td>
<td>HonoluluCC</td>
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<td>LeewardCC</td>
<td>PHRM 203, General Pharmacology</td>
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<tr>
<td>MauiCC</td>
<td>PHRM 203, General Pharmacology</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

11. This course is (check one and click in appropriate textbox and provide details):
   - Already articulated with
   - Provide details of existing or desired articulation (date, college(s), purposes, pre-major, etc.) in this space:
   - Appropriate for Articulation with PHRM 203 and NURS 203
   - Provide details of existing or desired articulation (date, college(s), purposes, pre-major or major, etc.) in this space: PHRM 203 in all other CC's are articulated with UH M PHRM 203 and UHH NURS 203.
   - Not yet appropriate for Articulation.

12. Reason for Initiating, Modifying or Deleting Courses or Other Pertinent Comment:
    To provide a pharmacology course to satisfy pre-admission requirement for the RN-BS and many other allied health programs.

13. Requested by: Joseph C. Cotti
    Department Chairperson: Date: 3/23/06

14. Approved by: Sean O'Keefe
    Curriculum Committee Chairperson: Date: 4/25/06

    Faculty Senate Chairperson: Date: 5/1/06

    Dean of Instruction: Date: 5/9/06

    Provost: Date: 

CCCM #6100 (Amended for WCC use October 2002)
Level of Review of Course Proposal at Windward Community College

<table>
<thead>
<tr>
<th>Signatures</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>3/23/06</td>
</tr>
<tr>
<td></td>
<td>3/23/06</td>
</tr>
</tbody>
</table>

1. Department Area (more than one departmental instructor's signature required)

2. Department

   [Signature]

   Department Chairperson

   Was this course discussed in a department meeting? ☐ Yes ☐ No

3. Division

   [Signature]

   4/3/06

4. Curriculum Committee Review

   Approved ☑

   Disapproved ☐

   Reason:

   [Signature]

   Curriculum Committee Chairperson

   [Signature]

   April 25, 2006

CCCM #6100 (Amended for WCC use October 2002)
WCC Form for New Course Proposals
(This sheet was originally pink.)

1. How is this course related to the education needs and goals of the College/Department/Community as reflected in the EDP/ADP?

PHRM 203 supports 2006 Updated Strategic Plan 3D. Explore the possibility of providing some of the general education requirements for transfer into nursing, allied health, and other vocational programs.

PHRM 203 is a pre-admission requirement to the RN-BS program at UHM SONDH as well as to the Nursing program at UH-Hilo. WCC Natural Science Department is already offering all the other pre-admission courses except Pharmacology. This course will complete the WCC Pre-Nursing Program.

2. Provide details of any additional staff, equipment, facilities, library/media material, faculty preparation and other financial support that would be required to implement this course. (Include an estimate of the actual cost of supplies and equipment.) What has been done to provide for these additional costs for the proposed date of offering? Who will teach the course?

Lecturer (Cynthia Rajani, Ph.D., UHM, KCC and WCC). No additional instrument/supply is required.

3. Is a similar course taught elsewhere in the UH system? Yes If yes, provide details of how this course differs from existing similar courses.

This course does not differ from PHRM 203 (UHM, all other CC’s) and NURS 203 (UHH).

4. Is this course experimental and/or unique to Windward Community College? No If yes, provide rationale and details of its impact on the College Curriculum

5. Is a similar course taught in the upper division level by a 4-year UH college? No If yes, explain why this course is appropriate at the lower division or how it differs from its upper division counterpart.

6. Please attach a complete course outline. Your course outline should address all the items listed in the Guidelines for Course Outlines.

7. If this course is numbered 100 or above or appropriate for transfer to a 4-year college, complete and attach WCC Form for Transfer Courses (blue). See criteria for transfer courses.

Original dated WCC 9/91
1. What change is proposed in the course? Provide specific information comparing both the “new” and “old” course.

2. What is the rationale for the change?

3. Is the change substantive enough to require a change in course identification? If so, explain thoroughly.

4. Is the course articulated with any 4-year program? *
   If yes, give details of the agreement(s) and explain any impact the proposed modifications may have on articulation.

5. Provide details of any additional staff, equipment, facilities, library/media material, faculty preparation and other financial considerations that would be required to implement this course modification. What has been done to provide for these additional costs? Who will teach the course? Is additional preparation needed?

6. Will this course modification result in any alterations in the number of hours required to attain a certificate or degree? * If yes, provide details and justification for these alterations.

7. If the course is renumbered to 100 or above, does it meet the criteria for transfer level courses? (Go to next page for transfer course criteria.) *
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

WCC Form for Transfer Courses
(To be completed for articulation with any 4-year UH campus)
(This sheet was originally blue.)

Course Alpha and Number PHRM 203

Submitted by Leticia U. Colmenares

Date March 22, 2006

1. List the counterpart to this course on any 4-year UH campus. Describe the relationship between the course any related baccalaureate program area.

This course is equivalent to PHRM 203 at UHM and NURS 203 at UHH. PHRM 203 is a pre-admission requirement for the RN-BS program at UHM and UHH.

2. Is this course taught or accepted by major accredited colleges or universities? Give one or two examples.

University of California, San Francisco NURS 141 Pharmacology and Nursing Care
University of Pittsburgh NUR 1110 Pharmacology and Therapeutics
University of Florida NUR 3145 Pharmacology for Nursing
University of Pennsylvania—NURS 242 Concepts of Pharmacology & Therapeutics

3. Please attach a complete course outline if you have not done so already. Your course outline should address all the items listed in the Guidelines for Course Outlines.
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

COURSE ARTICULATION FORM (GENERAL EDUCATION CORE)

ORIGINATING CAMPUS: Windward Community College          DATE SUBMITTED: March 22, 2006

COURSE ALPHA & NUMBER: PHRM 203          SEMESTER CREDITS: 3

COURSE TITLE: General Pharmacology

DATE OF OUTLINE: March 22, 2006          Year 2006

(** Representative outline, no multiple syllabi, please.)

1. Articulation committee to review this course:

   Standing Committees
   Written Communication  □
   Mathematical & Logical Thinking □
   World Civilizations □
   Languages □
   Arts & Humanities □
   Natural Science  ☑
   Social Science □

2. The information in this item is required by the reviewing committee so that it has a starting point for reviewing the course. It is the responsibility of the submitting campus to do the necessary research to provide this information.

   In the opinion of the originating campus, this course is equivalent to the following and/or meets the criteria for the indicated core categories. Every core category space, except your own campus, must be filled in (can include ‘none’). An equivalent course, if known, may be helpful to committee members but is not required.

<table>
<thead>
<tr>
<th>Receiving Campus</th>
<th>Equivalent Course (Alpha and Number)</th>
<th>Core Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>UH Hilo</td>
<td>NURS 203</td>
<td></td>
</tr>
<tr>
<td>UH Manoa</td>
<td>PHRM 203</td>
<td></td>
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<tr>
<td>UH West Oahu</td>
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<td></td>
</tr>
<tr>
<td>Hawaii CC</td>
<td>PHRM 203</td>
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<td>Maui CC</td>
<td>PHRM 203</td>
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<tr>
<td>Windward CC</td>
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</tr>
</tbody>
</table>

3. If submitted electronically, I understand that this outline will be posted to a publicly accessible web site to enable open access for reviewing committees and campuses. The outline will be taken off the site upon completion of the review.

Typed Name or Signature

Note: If possible submit coversheet and course outline electronically as e-mail attachments (preferably in ‘pdf’ format). If submitting in printed form, 20 copies of coversheet and course outline are required for distribution for appropriate review.

Note: UCA Clearinghouse
   John Muth, Office of the Chancellor for Community Colleges, is acting as staff to the University Council on Articulation and is responsible for tracking all courses submitted for articulation.

Revised 1/29/2001
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

COMMITTEE LEVEL:

1. When the committee has completed its review of a course, the "ARTICULATION RECOMMENDATION FORM" (revised 1/18/2001) should be filled in and attached to the outline. The committee chair should also sign the form.

2. If the committee choice is "accept," indicate receiving campus core area. If the committee choice is "not recommended," a reason must be provided. Outlines with missing or incomplete recommendation forms will be returned to the committee.

If a committee requires updated or more complete outlines, such requests should be made through the UCA Clearinghouse so that the new outline material can be tracked and placed in the file. If a committee requires more general supporting information, this should be requested through the course's supporting campus representative on the committee.

3. All committee recommendations should be sent to the UCA Clearinghouse for recordation and dissemination to the campuses. DO NOT SEND THE RECOMMENDATIONS DIRECTLY TO ANY CAMPUS.

RECEIVING CAMPUS:

1. Courses will be sent to each campus for consideration after they come out of committee. Each campus has its own internal process for the approval of courses for its general education core.

2. In all cases where a campus accepts a course into its general education core, it must also indicate which area or part of its core the course fits.

3. In all cases where a campus does not accept a course for articulation, it must supply a reason (even it is "we agree with the committee").

4. When campus actions are completed, these actions should be conveyed back to the UCA Clearinghouse for recordation and publication

5. The Community College Policy on Acceptance of UCA Reviewed Courses is a follows:

   (a) All Community Colleges agree to accept positive UCA committee recommendations for core, including core categories assigned by the committee.

   (b) All Community Colleges agree to accept the UCA committee judgment of not-Recommended (nR) without further review.

   (c) This policy is retroactive to the time the current articulation effort started.

   (d) The Community Colleges reserve the right to review and modify core category assignments as necessary to insure appropriate categorization and to realign such assignments if changes are made to the campus core structure. Such modifications shall not interfere with the timely publication of the student transfer handbook.

Note: UCA Clearinghouse

John Muth, Office of the Chancellor for Community Colleges, is acting as staff to the University Council on Articulation and is responsible for tracking all courses submitted for articulation.

Revised 1/29/2001
University of Hawaii Community Colleges
Proposal to Initiate, Modify or Delete a Course
Articulation with 4-year UH Campus Form

ARTICULATED COURSE
CHANGE IN ALPHA/NUMBER/TITLE

Old Course

Course Alpha & Number:

Title:

Revised Course

Course Alpha & Number:

Title:

Semester and Year when the revised course was/will be first offered:

Reason for the change in Alpha/Number/and/or Title:

Note: A current outline of the course must be submitted with this form. Undated outlines are not acceptable.

I certify that this course has had its alpha, number, and/or title changed, but that it is substantially the same course as the course that was reviewed and approved for articulation.

Campus: Windward Community College

Certifying Authority (Typed Name or Signature and Title)

Date:

SUBMIT TO: UCA Clearinghouse, Attn: John Muth
Chancellor's Office for CC, 2327 Dole Street

Revised 1/19/01
OUTLINE OF COURSE OBJECTIVES

COURSE NAME: General Pharmacology

COURSE ALPHA: PHRM 203

COURSE HOURS: 03

CATALOG DESCRIPTION:

Covers a wide range of drugs with emphasis on sites and mechanism of action, toxicity, fate and uses of major therapeutic agents. This course is intended for students in nursing and allied health fields.

REQUIREMENTS COURSE SATISFIES:

AT WCC: ELECTIVE FOR AA DEGREE IN LIBERAL ARTS

AT UH-MANOA: DB DIVERSIFICATION BIOLOGY

PREREQUISITES

“C” or better in Zool 141, Zool 142, Chem 152 or equivalents.

RECOMMENDED PREPARATION:

Math 25

ACTIVITIES REQUIRED AT SCHEDULED TIMES OTHER THAN CLASS TIME:

None

EFFECTIVE DATE:

SPRING 2007
Windward Community College Mission Statement

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

Instructor: Cynthia Rajani, Ph.D.
Office: Imiloa 121A
Office hours:
Telephone:
E-mail: rajani@hawaii.edu

Course Goals

Pharmacology 203 is intended to help students acquire knowledge of basic pharmacology concepts important to the understanding of the mechanism of drug action. The major classes of drugs will be covered in terms of therapeutic uses, toxicity, individual mechanisms of action and means of their administration.

Student Learning Outcomes

Upon successful completion of Pharmacology 203, a student should be able to:

- Describe the basic mechanisms of drug action.
- Demonstrate knowledge of the terminology and special concepts useful in the study of pharmacology.
- Describe how differences between individuals govern their response to drugs.
- Define how drugs are processed and biotransformed by the body.
- Identify frequent complications and side effects associated with the major drug classes.
- Describe significant interactions between drugs.
- Be able to use information from the pharmacokinetics of a specific drug to determine dosing schedules and best route of drug administration.
- State the therapeutic uses for each major drug group.

Skills or Competencies

1. Apply problem-solving skills to distinguish between relevant, irrelevant facts, opinions, speculation and bias through the appropriate use of evidence and observations.
2. Identify an information need and be able to retrieve it from electronic and library sources.
3. Obtain and synthesize information from various sources to evaluate a problem.
4. Apply numeric and graphical skills accurately and appropriately.
Course Tasks

1. Complete all assigned readings and exercises.
2. Present a short case study and apply the skills and competencies listed above to explain the resolution of the case.

Assessment Tasks and Grading

1. Three exams will be given during the semester in order to evaluate the level of each student’s achievement in the course. Each of these exams will cover the material indicated in the course schedule. The dates of these exams are given in the course schedule. The tests will be placed in The Learning Center and specific deadlines will be given for test completion. Failure to meet the deadline will result in a “0” grade unless a certified medical excuse is presented or some other documentation that reasonably explains your inability to meet the deadline. The Final Exam will be given in class at the scheduled time.

2. Five quizzes will be given on days listed in the course schedule. The questions will relate to the material covered from the last quiz/exam to the date of the scheduled quiz. Absence on the day of a quiz will result in a “0” grade unless a certified medical excuse is presented or some other written documentation explaining your absence.

3. Attendance will be taken each class period and will be worth 5% of your final grade. Any “excused” absence must be discussed with the instructor at least one week prior to the time of the first missed class period.

4. Grading will be done using the following criteria:
   
   a. Exams (3) ------ 15% each (45% of total grade)
   b. Quizzes (5) --------- 5% each (25% of total grade)
   c. Case Study------------ 10% of total grade
   d. Final Exam------------ 15% of total grade
   e. Attendance------------ 5% of total grade

   Total 100%

Course grades will be assigned as follows:

A  89-100%
B  79-88%
C  65-78%
D  50-64%
F  below 50%
Learning Resources and Materials

2. 3-ring binder
3. Scientific calculator
4. Internet Access

Student Contributions

1. Complete assignments before the class period they are due. If you are absent, it your responsibility to find out what is needed for next class and what went on during the missed class.
2. You are responsible for your own learning. Ask questions and utilize available tutoring and/or instructor’s office hours for extra help when needed.
3. Keep track of test and assignment deadlines.

Course Content and Schedule

Important Dates: Last day for withdrawal, (mm/dd); last day of instruction, (mm/dd).

Holidays:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Date</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Pharmacology</td>
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<td>Pharmacodynamics</td>
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<td>Pharmacokinetics</td>
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<td>Drug Legislation</td>
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<td>Quiz 1 (take-home)</td>
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<tr>
<td>Autonomous Nervous System</td>
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<td>Anatomy and Function</td>
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<tr>
<td>Pharmacology of ANS</td>
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<tr>
<td>Exam 1 (take-home)</td>
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<tr>
<td>Central Nervous System</td>
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<td>Neurodegenerative diseases</td>
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<td>Anxiolytic and Hypnotic Drugs</td>
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<td>Anesthetics</td>
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<td>Antidepressant Drugs</td>
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<td>Opioid Analgesics</td>
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<tr>
<td>Quiz 2</td>
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</tbody>
</table>
Cardiovascular System
  Physiology of Heart Muscle Contraction
  Antiarrhythmic Drugs
  Antianginal Drugs
  Antihypertensive Drugs

Exam 2

Drugs and Blood Dysfunctions
  Thrombosis
  Bleeding Disorders
  Anemias
  Hyperlipidemia

Renal System
  Normal Kidney Function
  Kidney Function in Disease
  Diuretic Drugs

Quiz 3

Endocrine System
  Hypothalamic and Anterior Pituitary Hormones
  Posterior Pituitary
  Thyroid Hormones
  Pancreatic Hormones
  Sex Hormones
  Adrenocorticosteroid Hormones

Exam 3 (take-home)

Drugs affecting other Organ Systems
  Respiratory System
  Gastrointestinal and Antiemetic Drugs
  Erectile Dysfunction, Osteoporosis, Obesity

Chemotherapeutic Drugs
  Overview of antimicrobial therapy
  Antimicrobial Drugs
  Antimycobacterial Drugs
  Antifungal Drugs
  Antiprotozoal Drugs
  Antihelmintic Drugs
  Antiviral Drugs
  Immunosuppressive/ Anti-inflammatory
  Autocoids
Quiz 4

Anticancer Chemotherapy
   Overview
   Chemotherapy for cancer

Quiz 5

Final Exam will be given on (mm/dd) in Room (rm/bldg) at (time).

The above course schedule is subject to change. Additional hand-outs and assignments may be given if deemed necessary by the instructor.