

HS M15: PHARMACOLOGY

Originator

clee

Co-Contributor(s)
Name(s)

Everlove, John (john_everlove1)

College

Moorpark College

Discipline (CB01A)

HS - Health Sciences

Course Number (CB01B)

M15

Course Title (CB02)

Pharmacology

Banner/Short Title

Pharmacology

Credit Type

Credit

Start Term

Fall 2021

Co-listed (Same-as) Course(s)

NS 20

Taxonomy of Programs (TOP) Code (CB03)

1230.10 - *Registered Nursing

SAM Priority Code (CB09)

C - Clearly Occupational

Control Number
Primary Minimum Qualification

NURSING

Department

Nursing (1120)

Division

MC EATM, Life & Health Sci

Catalog Course Description

Introduces mechanisms and uses of currently available drugs, establishing a foundation for understanding future developments in drug therapy and for administering drugs efficiently and safely. Applies drug information and mathematical calculations performed in clinical settings. (Same as NS M20.) Provider approved by the California Board of Registered Nursing, provider number CEP 02811 for 45 contact hours.

Taxonomy of Programs (TOP) Code (CB03)

1201.00 - *Health Occupations, General

Course Credit Status (CB04)

D (Credit - Degree Applicable)

Course Transfer Status (CB05) (select one only)

B (Transferable to CSU only)

Course Basic Skills Status (CB08)

N - The Course is Not a Basic Skills Course

SAM Priority Code (CB09)

C - Clearly Occupational

Course Cooperative Work Experience Education Status (CB10)

N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)

Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)

N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)

Y - Not Applicable

Course Noncredit Category (CB22)

Y - Credit Course

Funding Agency Category (CB23)

Y - Not Applicable (Funding Not Used)

Course Program Status (CB24)

2 - Not Program Applicable

General Education Status (CB25)

Y - Not Applicable

Support Course Status (CB26)

N - Course is not a support course

Field trips

Will not be required

Grading method

(L) Letter Graded

Alternate grading methods

(O) Student Option- Letter/Pass

(P) Pass/No Pass Grading

Does this course require an instructional materials fee?

No

Repeatable for Credit

No

Is this course part of a family?

No

Units and Hours**Carnegie Unit Override**

No

In-Class**Lecture****Minimum Contact/In-Class Lecture Hours**

52.5

Maximum Contact/In-Class Lecture Hours

52.5

Activity**Laboratory****Total in-Class****Total in-Class****Total Minimum Contact/In-Class Hours**

52.5

Total Maximum Contact/In-Class Hours

52.5

Outside-of-Class**Internship/Cooperative Work Experience**

Paid

Unpaid

Total Outside-of-Class**Total Outside-of-Class****Minimum Outside-of-Class Hours**

105

Maximum Outside-of-Class Hours

105

Total Student Learning**Total Student Learning****Total Minimum Student Learning Hours**

157.5

Total Maximum Student Learning Hours

157.5

Minimum Units (CB07)

3

Maximum Units (CB06)

3

Student Learning Outcomes (CSLOs)

Upon satisfactory completion of the course, students will be able to:

- | | |
|---|--|
| 1 | correctly calculate medication dosages for currently available drugs. |
| 2 | demonstrate understanding of safe administration of pharmaceutical medication. |

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- | | |
|----|--|
| 1 | describe the theories of drug action. |
| 2 | describe the principles of pharmacodynamics and pharmacokinetics. |
| 3 | define pharmacological terminology and abbreviations. |
| 4 | identify dosage forms and routes of administration. |
| 5 | identify units of measure for drug dosages and calculate doses. |
| 6 | identify and describe the therapeutic action of commonly prescribed drug categories. |
| 7 | identify a drug's category, given its name. |
| 8 | identify several common drugs within a drug category. |
| 9 | identify the diseases or conditions that a given drug is used to treat or prevent. |
| 10 | identify several drugs used to treat a given disease or condition. |
| 11 | identify common drug interactions. |
| 12 | identify common side effects of drugs and drug categories. |

Course Content**Lecture/Course Content**

10% Pharmacology theories, principles of pharmacodynamics and pharmacokinetics, and terminology
 10% Pharmacological treatments for common diseases.
 60% Therapeutic action of commonly prescribed drugs, drug categories, drug side effects, drug interactions
 20% Dosage forms and routes, units of measure, drug calculations

Laboratory or Activity Content

n/a

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Problem solving exercises
 Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Classroom Discussion
 Computational homework
 Group projects
 Individual projects
 Objective exams
 Problem-solving exams
 Reports/papers
 Research papers
 Skills demonstrations

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Class activities
 Class discussions
 Distance Education
 Group discussions

Lecture
 Other (specify)
 Small group activities

Specify other method of instruction

medication calculation demonstration

Describe specific examples of the methods the instructor will use:

PowerPoint presentation and lecture on the therapeutic actions of commonly prescribed drug classes.

Representative Course Assignments

Writing Assignments

Describe, in layperson's terms, the patient counseling a client should receive regarding a drug of the student's choosing. Describe usage, expected results, side effects, and when to call the prescriber.

Contrast the purposes and usage of current drug therapies.

Describe, in writing, a commonly prescribed drug's classification and its relevant core drug knowledge (pharmacokinetics, pharmacodynamics, contraindications and precautions, adverse effects).

Critical Thinking Assignments

Evaluate an assessment of a case study of a patient, determining the presence of side or adverse effects from drugs commonly used to treat a given disease or condition.

Analyze a case study patient's drug regime for potential drug interactions.

Prepare an analytic report on current drug therapies.

Reading Assignments

Assigned reading from the required text about pharmacokinetics.

Read peer-reviewed journal articles about current drug therapies for a common medical diagnoses.

Skills Demonstrations

Demonstration of medication calculations using ratio proportion.

Demonstration of medication calculations using dimensional analysis.

Outside Assignments

Representative Outside Assignments

Describe how federal laws govern the development, approval, and distribution of prescribed drug therapy by utilizing assigned readings and conducting internet research.

Investigate the pharmacologic actions of 5 drugs per week in drug reference resources.

Conduct library/internet research on the effects of common drugs on diseases and conditions.

Articulation

C-ID Descriptor Number

HIT 107X

Status

Aligned

Equivalent Courses at 4 year institutions

University	Course ID	Course Title	Units
CSU Stanislaus	NURS 2860	Pharmacology in Nursing	3
CSU Sacramento	NURS 14	Pharmacology	2

Comparable Courses within the VCCCD

NS V07 - Pharmacology

Equivalent Courses at other CCCs

College	Course ID	Course Title	Units
Solano Community College	NURS 52	Pharmacology for Nursing	3
Coastline Community College	BIOL C200	Pharmacology	3
Saddleback College	N160	Pharmacology for Nursing	3

District General Education**A. Natural Sciences****B. Social and Behavioral Sciences****C. Humanities****D. Language and Rationality****E. Health and Physical Education/Kinesiology****F. Ethnic Studies/Gender Studies****CSU GE-Breadth****Area A: English Language Communication and Critical Thinking****Area B: Scientific Inquiry and Quantitative Reasoning****Area C: Arts and Humanities****Area D: Social Sciences****Area E: Lifelong Learning and Self-Development****Area F: Ethnic Studies****CSU Graduation Requirement in U.S. History, Constitution and American Ideals:****IGETC****Area 1: English Communication****Area 2A: Mathematical Concepts & Quantitative Reasoning****Area 3: Arts and Humanities****Area 4: Social and Behavioral Sciences****Area 5: Physical and Biological Sciences****Area 6: Languages Other than English (LOTE)****Textbooks and Lab Manuals****Resource Type**

Textbook

DescriptionBurchum, Jacqueline R., and Laura D. Rosenthal. *Lehne's Pharmacology for Nursing Care*. 10th ed., Elsevier, 2018.

Resource Type

Textbook

Description

McCuistion, Linda E., et al. *Pharmacology: A Patient-Centered Nursing Process Approach*. 9th ed., Elsevier, 2017.

Resource Type

Textbook

Description

Karch, Amy M. *Focus on Nursing Pharmacology*. 8th ed., Wolters Kluwer, 2020.

Library Resources**Assignments requiring library resources**

Research using the Library's print and online resources for papers and reports on such topics as how federal laws govern the development, approval, and distribution of prescribed drug therapy.

Sufficient Library Resources exist

Yes

Example of Assignments Requiring Library Resources

Summarize a peer-reviewed journal article about the effects of common drugs on diabetes mellitus type 2.

Distance Education Addendum**Definitions****Distance Education Modalities**

Hybrid (51%–99% online)

Hybrid (1%–50% online)

100% online

Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.

Yes

Regular Effective/Substantive Contact

Hybrid (1%–50% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	<p>Online instructors will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics. Instructors will provide students with feedback on the content and quality of assignments and discussion posts.</p> <p>Additionally, instructors may engage students using the following communication activities available in the online classroom: contact students via e-mail within the course shell, by campus e-mail, and/or MyVCCCD.</p> <p>Instructors may involve students in active learning with the following activities: students may complete homework and receive feedback through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes; students may interact with the instructor and classmates using an online discussion forum to ask questions; students may submit questions to the instructor by email or ask in person in a virtual classroom; instructor may create student groups or group activities using the online course.</p>
E-mail Other DE (e.g., recorded lectures)	<p>Contact with students by college or Canvas email.</p> <p>Online instructors will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics.</p> <p>"Announcement" tool to remind students of important assignments and due dates; provide students with an online schedule of class events using the "calendar" tool in the online course shell.</p> <p>Instructors may involve students in active learning with the following activities: students may view video lessons and/or text-based lessons corresponding to course content and learning objectives; students may complete homework through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes.</p>
Video Conferencing	<p>Lectures, study sessions.</p> <p>Instructors may involve students in active learning with the following activities: students may view video lessons and/or text-based lessons corresponding to course content and learning objectives; students may complete homework through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes; students may interact with the instructor and classmates using an online discussion forum to ask questions; instructor may create student groups or group activities using the online course.</p>

Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	<p>Online instructors will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics. Instructors will provide students with feedback on the content and quality of assignments and discussion posts.</p> <p>Additionally, instructors may engage students using the following communication activities available in the online classroom: contact students via e-mail within the course shell, by campus e-mail, and/or MyVCCCD.</p> <p>Instructors may involve students in active learning with the following activities:</p> <p>students may complete homework and receive feedback through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes; students may interact with the instructor and classmates using an online discussion forum to ask questions; students may submit questions to the instructor by email or ask in person in a virtual classroom; instructor may create student groups or group activities using the online course.</p>
E-mail	Contact with students by college or Canvas email.
Other DE (e.g., recorded lectures)	<p>Online instructors will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics.</p> <p>"Announcement" tool to remind students of important assignments and due dates; provide students with an online schedule of class events using the "calendar" tool in the online course shell.</p> <p>Instructors may involve students in active learning with the following activities:</p> <p>students may view video lessons and/or text-based lessons corresponding to course content and learning objectives; students may complete homework through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes.</p>
Video Conferencing	<p>Lectures, study sessions.</p> <p>Instructors may involve students in active learning with the following activities:</p> <p>students may view video lessons and/or text-based lessons corresponding to course content and learning objectives; students may complete homework through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes; students may interact with the instructor and classmates using an online discussion forum to ask questions; instructor may create student groups or group activities using the online course.</p>

100% online Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	<p>Online instructors will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics. Instructors will provide students with feedback on the content and quality of assignments and discussion posts.</p> <p>Additionally, instructors may engage students using the following communication activities available in the online classroom: contact students via e-mail within the course shell, by campus e-mail, and/or MyVCCCD.</p> <p>Instructors may involve students in active learning with the following activities:</p> <p>students may complete homework and receive feedback through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes; students may interact with the instructor and classmates using an online discussion forum to ask questions; students may submit questions to the instructor by email or ask in person in a virtual classroom; instructor may create student groups or group activities using the online course.</p>
E-mail	Contact with students by college or Canvas email.
Other DE (e.g., recorded lectures)	<p>Online instructors will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics.</p> <p>"Announcement" tool to remind students of important assignments and due dates; provide students with an online schedule of class events using the "calendar" tool in the online course shell.</p> <p>Instructors may involve students in active learning with the following activities:</p> <p>students may view video lessons and/or text-based lessons corresponding to course content and learning objectives; students may complete homework through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes.</p>
Video Conferencing	<p>Lectures, study sessions.</p> <p>Instructors may involve students in active learning with the following activities:</p> <p>students may view video lessons and/or text-based lessons corresponding to course content and learning objectives; students may complete homework through the online course, and/or using an interactive online homework system provided by a publishing company; students may engage in internet searches and Library online database resources on topics corresponding to course content and learning objectives; students may test their knowledge with interactive online quizzes; students may interact with the instructor and classmates using an online discussion forum to ask questions; instructor may create student groups or group activities using the online course.</p>

Examinations**Hybrid (1%–50% online) Modality**

Online
On campus

Hybrid (51%–99% online) Modality

Online
On campus

Primary Minimum Qualification

HEALTH

Review and Approval Dates**Department Chair**

03/02/2021

Dean

03/04/2021

Technical Review

03/04/2021

Curriculum Committee

03/16/2021

DTRW-I

04/08/2021

Curriculum Committee

MM/DD/YYYY

Board

05/11/2021

CCCCO

MM/DD/YYYY

Control Number

CCC000428473

DOE/accreditation approval date

MM/DD/YYYY