NS M25: BASIC PATHOPHYSIOLOGY

Originator

clee

Co-Contributor(s)

Name(s)

Dieterich, Michelle (mdieterich)

College

Moorpark College

Discipline (CB01A)

NS - Nursing Science

Course Number (CB01B)

M25

Course Title (CB02)

Basic Pathophysiology

Banner/Short Title

Basic Pathophysiology

Credit Type

Credit

Start Term

Fall 2022

Formerly

HS M25 - Intro. to Pathophysiology

Catalog Course Description

Introduces the fundamentals of pathophysiology, focusing on physiologic changes and altered functions resulting from disease processes. Applies principles of anatomy, physiology, and chemistry as the foundation for study of the pathogenesis of various disorders. Explores clinical manifestations, diagnostic approaches, preventative measures, and current therapeutic regimens of selected disorders.

Taxonomy of Programs (TOP) Code (CB03)

1230.10 - *Registered Nursing

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

- (0) 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

70

Maximum Contact/In-Class Lecture Hours

70

Activity

Laboratory

Total in-Class

Total in-Class

Total Minimum Contact/In-Class Hours

70

Total Maximum Contact/In-Class Hours

70

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Unpaid

Total Outside-of-Class

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

140

Maximum Outside-of-Class Hours

140

Total Student Learning

Total Student Learning

Total Minimum Student Learning Hours

210

Total Maximum Student Learning Hours

210

Minimum Units (CB07)

4

Maximum Units (CB06)

4

Advisories on Recommended Preparation

ANAT M01 and PHSO M01 OR PHSO M01H

Student Learning Outcomes (CSLOs)

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

demonstrate an understanding of pathophysiology and its effects on the following body systems: neurological, cardiovascular, respiratory, gastrointestional, genitourinary, endocrine, integumtary, hematological, musculoskeletal, and immunological.

Course Objectives

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

- define the study of pathophysiology and associated terminology.
- 2 describe common physiologic stressors and the human adaptive and maladaptive responses.
- 3 discuss the influence of age, genetics, environment, stress, and nutrition on disease processes.
- 4 identify the pathological aspects of altered health states associated with specific body systems as compared to the normal phsiological processes.

- summarize the risk factors, etiology, pathogenesis, and clinical manifestations associated with altered health states in various body systems.
- 6 analyze and interpret common assessment findings associated with specific altered health states.
- 7 develop an understanding of the current diagnostic and treatment approach in patients experiencing altered health states
- 8 discuss the role of health promotion and disease prevention across the lifespan.

Course Content

4

Lecture/Course Content

5% Introduction to pathophysiology and principles of disease prevention and health promotion

5% Fluid, electrolyte, and acid-base imbalance

5% Infectious diseases and abnormal immune responses

5% Altered genetics and cancer

5% Hematological system

10% Cardiovascular system

10% Respiratory system

10% Genitourinary system

10% Gastrointestinal system

10% Endocrine system

10% Neurological system

10% Integumentary and musculoskeletal system

5% Complex, multisystem disorders

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): 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):

Objective exams

Quizzes

Written analyses

Written homework

Other (specify)

Classroom Discussion

Participation

Reports/Papers/Journals

Other

Critical thinking case studies and associated discussions Completion of online activities

Instructional Methodology

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

Audio-visual presentations

Case studies

Computer-aided presentations

Distance Education

Group discussions

Internet research

Lecture

Readings

Web-based presentations

NS M25: Basic Pathophysiology

Describe specific examples of the methods the instructor will use:

Asynchronous lectures with audio recording.

Activities assigned from the DavisAdvantage website. In this website instructor will use worksheets and power point presentations to help students understand the concepts.

Representative Course Assignments

Writing Assignments

write short-answer responses to chapter questions regarding pathophysiologic processes such as pneumonia.

write an educational presentation on a specific disease process for a target audience.

write answers to case study questions posed in small group discussion.

Critical Thinking Assignments

compare and contrast the etiology and clinical manifestations of disease processes, such as peripheral artery disease vs. peripheral vascular disease.

participate in case studies and use critical thinking to analyze possible causes of altered health function and anticipate complications, such as Type 1 diabetes mellitus and diabetic ketoacidosis.

analyze and interpret data related to a specific altered health state, such as acid-base imbalance.

Reading Assignments

Read assigned content from the required textbook on topics such as abnormal immune responses and answer questions about the topic.

Read scholarly articles related to the disease topic and share a summary of findings with the class.

Skills Demonstrations

n/a

Other assignments (if applicable)

n/a

Outside Assignments

Representative Outside Assignments

research current health related statistics and current clinical guidelines, such as the current blood pressure guidelines for diagnosing hypertension and risk for cardiovascular disease.

work in groups to critically analyze case studies which illustrate a body system and write an evidenced-based practice analysis of the case study.

Articulation

C-ID Descriptor Number

HIT 105X

Status

Approved

Equivalent Courses at 4 year institutions

University	Course ID	Course Title	Units
CSU, East Bay	NURS 2005	Clinical Pathophysiology	4
San Diego State Univ.	NURS 208	Pathophysiology	3
San Diego State Univ.	NURS 208	Pathophysiology	3
CSU, Los Angeles	NURS 250	Introduction to Pathophysiology for Nursing Practice	4

Equivalent Courses at other CCCs				
College	Course ID	Course Title	Units	
Santa Barbara City College	HIT 204	Pathophysiology	3	
Saddleback College	BIOL 112	Pathophysiology	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

Course is CSU transferable

Yes

CSU Baccalaureate List effective term:

F1998

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

Classic Textbook

No

Description

Capriotti, Theresa M., Pathophysiology: Introductory Concepts and Clinical Perspectives. 2nd ed., F.A. Davis, 2020.

Resource Type

Software

Description

Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives. F.A. Davis.

Resource Type

Textbook

Classic Textbook

No

Description

Norris, Tommie L. Porth's Pathophysiology: Concepts of Altered Health States. 10th ed., Wolters Kluwer, 2019.

Resource Type

Textbook

Classic Textbook

No

Description

Huether, Sue and McCance, Kathryn. *Understanding Pathophysiology.* 7th ed., Elsevier, 2019.

Library Resources

Assignments requiring library resources

Research using the library's print and online resources.

Sufficient Library Resources exist

Yes

Example of Assignments Requiring Library Resources

Using the Library's print and online resources for looking up scientific articles and information for discussion postings and case studies, including determining the pathophysiologic cause of death for a simulated patient in a case study.

Distance Education Addendum

Definitions

Distance Education Modalities

Hybrid (1%-50% online) Hybrid (51%-99% 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.

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)	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. 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. 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.
E-mail	Contact with students by college or Canvas email
Other DE (e.g., recorded lectures)	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. "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. 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.

Video Conferencing

Lectures, study sessions.

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.

Hybrid (51%-99% online) Modality:

Method of Instruction

Document typical activities or assignments for each method of instruction

Asynchronous Dialog (e.g., discussion board)

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.

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.

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.

Contact with students by college or Canvas email

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.

"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.

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E-mail

Other DE (e.g., recorded lectures)

Video Conferencing

Lectures, study sessions.

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100% online Modality:

Method of Instruction

Document typical activities or assignments for each method of instruction

Asynchronous Dialog (e.g., discussion board)

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Examinations

Hybrid (1%-50% online) Modality

On campus Online

Hybrid (51%-99% online) Modality

On campus Online

Primary Minimum Qualification

NURSING

Review and Approval Dates

Department Chair

02/22/2022

Dean

03/01/2022

Technical Review

03/17/2022

Curriculum Committee

4/5/2022

DTRW-I

MM/DD/YYYY

Curriculum Committee

MM/DD/YYYY

Board

MM/DD/YYYY

CCCCO

MM/DD/YYYY

Control Number

CCC000429518

DOE/accreditation approval date

MM/DD/YYYY