

Department of Physician Assistant Education Master of Science in Medicine

4 units

MSM 6103 FUNDAMENTALS OF CARDIOVASCULAR DISORDERS SPRING 2023

Meeting days	Instructor title and name: William (Bill)	
Meeting days:	Arend, PA-C	
Meeting times:	Phone: 619-694-7697	
Meeting location: 154 and Skills lab	Email: warend@pointloma.edu	
Final Exam and OSCE: 4/10/23, 8:00am-5:00pm	Office location and hours: Text for questions	

PLNU Mission

To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

COURSE DESCRIPTION

This course covers the epidemiology, etiology, risk factors, pathogenesis, pathophysiology, complications, and differential diagnoses of commonly encountered cardiovascular diseases and disorders through symptoms-based and systems-based approaches. Management of patients with these diseases and disorders across the life span from initial presentation through follow-up for acute, chronic, and emergent cases will be covered, as will referral when necessary, preventive medicine, and patient education.

COURSE GOALS

The goal of this course is to provide the appropriate basic science background essential to the understanding and diagnosis of disease patterns related to the cardiovascular system and to provide the student with the skills and knowledge necessary for the diagnosis and management of common cardiac and vascular disorders.

PROGRAM LEARNING OUTCOMES

The content in this course will contribute to the student's proficiency in this/these area(s):

- 1. Gather a history and perform a physical examination. (MK, IC, PC, PR)
- 2. Prioritize a differential diagnosis following a clinical encounter. (MK, PC, PB, PR, SB)
- 3. Recommend and interpret common diagnostic and screening tests. (MK, IC, PC, PR, PB, SB)
- 4. Enter and discuss orders and prescriptions. $^{(MK,\,IC,\,PC,\,PR,\,PB,\,SB)}$
- 5. Document a clinical encounter in the patient record (MK, IC, PC, PR)
- 6. Provide an oral presentation of a clinical encounter. (MK, IC, PC, PB, PR)
- 7. Form clinical questions and retrieve evidence to advance patient care. (MK, PC, PR, PB, SB)
- 8. Give or receive a patient handover to transition care responsibility. $^{(MK, PC, PR, IC, PB)}$
- 9. Collaborate as a member of an inter-professional team. MK, IC, PC, PR, PB, SB
- 10. Recognize a patient requiring urgent or emergent care and initiate evaluation and management. (MK, IC, PC, PR, PB, SB)
- 11. Obtain informed consent for tests and/or procedures. MK, IC, PC, PR, PB
- 12. Perform general procedures of a physician assistant. MK, IC, PC, PR, PB, SB

Initials indicate PA core competency required to meet the PLO/CLO. PA Core Competencies:

MK = Medical Knowledge IC = Interpersonal Skills & Communication PC = Patient Care

PR = Professionalism PB = Practice-based Learning SB = Systems-based Practice

COURSE LEARNING OUTCOMES

Successful completion of this course requires demonstration of the skills and knowledge outlined here at, minimally, the ADVANCED BEGINNER level:

- 1. Obtain a history and perform a focused physical examination relevant to symptoms found within this organ system. (PC2; MK1; IC1; IC7; PR1; PR3; PR5)
- 2. Prioritize a differential diagnosis based on the history and physical findings in a patient with a cardiovascular complaint. (PC2, PC4, MK2, MK3, MK4, PB1, IC2, PR8)
- 3. Recommend common diagnostic and screening tests, pharmacotherapeutics, and management based on their applicability to the differential diagnosis. (PC4, PC5, PC7, PC9, MK1, MK4, PB9, SB3)
- 4. Document a clinical encounter in the patient record. (PC4, PC6, IC1, IC2, IC5, PR4, SB1)
- 5. Provide an oral presentation of a clinical encounter including justification of the proposed management plan. (PC2; PC6; IC1; IC2; PB1; PR1; PR3)
- 6. Form clinical questions and retrieve evidence to advance patient care. (PC5, PC7, MK3, MK4, PB1, PB3, PB6, PB7, PB8, PB9)
- 7. Recognize a patient requiring urgent or emergent care for a cardiovascular condition or the patient in whom the manifestation of systemic disease is cardiovascular and initiate evaluation and management. (PC1, PC2, PC3, PC4, PC5, PC6, IC6, PR1, PR5)

INSTRUCTIONAL OBJECTIVES

Upon completion of the ANATOMY AND PHYSIOLOGY section of the course, the student will be able to:

- 1. Describe the relationship between blood flow and blood pressure. Comprehension, B2.02a, B2.02b
- 2. Summarize the flow of blood from the left ventricle through the coronary arteries. Comprehension, B2.02a, B2.02b
- 3. Describe the effect of ion movement on membrane potential of cardiac conductive and contractile cells. Comprehension, B2.02b
- 4. Describe factors that affect stroke volume and cardiac output. Comprehension, B2.02b
- 5. Illustrate the events that occur during the cardiac cycle. Comprehension, B2.02b
- 6. Explain the effects of the sympathetic nervous system on cardiac contractility and ventricular function. Application, B2.02b
- 7. Discuss bulk flow and classify the Starling forces that determine the balance of filtration and reabsorption in the capillaries. Analysis, B2.02b
- 8. Analyze and relate characteristics of an electrocardiogram to the events during a cardiac cycle.

 Analysis, B2.02b
- 9. Compare and contrast systolic pressure, diastolic pressure, pulse pressure and mean arterial pressure. Evaluation, B2.02b
- 10. Create a flow chart to trace blood flow from the aorta to the major arterial branches of the upper and lower extremities. Synthesis, B2.02a, B2.02b

Upon completion of the PATHOPHYSIOLOGY section of the course, the student will be able to:

- 1. Discuss the functions of chylomicrons, HDL, LDL and VLDL, and their impact on cardiovascular disease. Comprehension, B2.02c
- 2. Compare and contrast cardiac dilatation and hypertrophy. Analyze, B2.02c
- 3. Describe the alteration in conduction responsible for most common arrhythmias: i.e., tachycardia, bradycardia, A-V block, Wolff-Parkinson-White (WPW) syndrome, bundle branch block, flutter, fibrillation. Comprehension, B2.02c
- 4. Relate the electrocardiographic changes associated respectively to myocardial ischemia, injury, and death. Define injury current and describe how it alters the S-T segment of the ECG. Analyze, B2.02c
- 5. Use the intersection point of the cardiac function curve and vascular function curve to predict how interventions such as hemorrhage, heart failure, autonomic stimulation, and exercise will affect cardiac output and right atrial pressure. Predict how physiological compensatory changes would alter acute changes. Evaluation, B2.02c
- 6. Describe the expected auscultation sounds that define mitral stenosis, mitral insufficiency, aortic stenosis, and aortic insufficiency. Predict how these pathologic changes would affect cardiac mechanics and blood pressure. Evaluation, B2.02c

Upon completion of the PHYSICAL DIAGNOSIS section of the course, the student will be able to:

^{1.} Generate an appropriate and comprehensive cardiovascular medical history from patients presenting with signs and symptoms suggestive of cardiovascular disease. ^{Application, B2.07a}

- Perform a focused physical examination on a patient with a suspected cardiovascular disease.
 Application, B2.07b
- 3. Analyze heart sounds heard on physical examination including specific chest wall areas of palpation/auscultation in relation to the cardiac anatomy and physiology to discuss the normal cardiac cycle. Analyze, B2.07b
- 4. Correctly identify murmurs, rubs, gallops, and clicks heard during the cardiac cycle describing their pathophysiologic origin. Application, B2.02c, B2.07c
- 5. Apply an understanding of cardiac anatomy, physiology and pathophysiology to the following physical findings: Application, B2.02a, B2.02b, B2.02c, B2.07c
 - a. blood pressure differences between upper extremities
 - b. blood pressure differences between upper and lower extremities
 - c. pulse abnormalities, including
 - pulsus alternans
 - pulsus paradoxus
 - d. elevated jugular venous pressure (JVP)
 - e. abnormalities of the point of maximal impulse (PMI)
 - f. valve clicks and snaps
 - g. pericardial rubs
 - h. physiological vs. pathological splitting of S1 and S2

Upon completion of the **CLINICAL MEDICINE** section of the course, the student will: B2.03

- 1. Given a patient across all age groups, with any of the following disorders; interview and elicit a comprehensive, relevant medical history, B2.07a perform a complete and focused physical examination and identify the physical findings, B2.07b generate a complete list of differential diagnoses prioritizing them appropriately, B2.07c recommend an appropriate work-up, order and interpret diagnostic studies, B2.07d propose patient management including acute and chronic care plans, B2.07e provide patient education and referral. B2.07f, Evaluate
 - a. Essential hypertension
 - b. Congestive Heart Failure
 - c. Angina pectoris stable
- 2. Given a patient across all age groups, with any of the following vascular diseases: interview and elicit a comprehensive, relevant medical history, B2.07a perform a complete and focused physical examination and identify the physical findings, B2.07b generate a complete list of differential diagnoses prioritizing them appropriately, B2.07c recommend an appropriate work-up, order and interpret diagnostic studies, B2.07d propose patient management including acute and chronic care plans, B2.07e provide patient education and referral. B2.07f, Evaluate
 - a. Arterial embolism/thrombosis
 - b. Giant cell arteritis

- c. Peripheral artery disease
- d. Phlebitis/thrombophlebitis
- e. Varicose veins
- f. Venous insufficiency
- g. Venous thrombosis
- 3. Given a patient across all age groups, with the following **signs and symptoms:** interview and elicit a comprehensive, relevant medical history, B2.07a perform a complete and focused physical examination and identify the physical findings, B2.07b generate a complete list of differential diagnoses prioritizing them appropriately, B2.07c recommend an appropriate work-up, order and interpret diagnostic studies, B2.07d propose patient management including acute and chronic care plans, B2.07e provide patient education and referral. B2.07f, Evaluate
 - a. Abnormal Rhythm:

Bradycardia:

- 1. Sinus bradycardia:
 - a. Hypokalemia,
 - b. b.
 - c. <u>Torsades de Pointes (TdP): Pathogenesis and Clinical Findings*</u>
 - c. Sick Sinus Syndrome*
 - d. Hypothermia
 - e. Cardiac drugs
 - f. Hypoglycemia
 - g. Sleep apnea
- 2. Hyperkalemia
- Second Degree Heart Block: Mobitz Type I (Wenckebach): Pathogenesis and clinical findings*
- 1. 4.
- 2. <u>Second Degree Heart Block: Mobitz Type II: Pathogenesis and clinical findings*</u>
- 5.
- 2. <u>Third Degree (Complete) AV Block: Pathogenesis and Clinical Findings*</u>
- 6. Right Bundle Branch Block: Pathogenesis and clinical findings*
- 7.
- 8. Left Bundle Branch Block: Pathogenesis and clinical findings*

Tachycardia:

- 3.
- 4. Wolff-Parkinson-White: Pathogenesis and clinical findings
- 5.
- 6. Atrial Fibrillation: Clinical Findings
- 1. Atrial Fibrillation: Complications*

- 2. Atrial Fibrillation: Pathogenesis
- 1. 2.
- 2. Atrial Flutter
- 3. Paroxysmal Supraventricular Tachycardia*
- 4. 4.
- 5. Ventricular Fibrillation: Pathogenesis and clinical findings*
- 6. 5.
- 7. <u>Dilated Cardiomyopathy (DCM)*</u>
- 6. Ventricular Tachycardia

Asymptomatic

- 1. 1st Degree AV block: Pathogenesis and Clinical Findings
- 2. <u>Anterior and Posterior Fascicular Blocks: Pathogenesis and clinical findings*</u>

b. Chest Discomfort:

Chest pain with dyspnea, tachypnea, peripheral edema

- 1.
- 2. Hypertrophic Cardiomyopathy: Pathogenesis and Clinical Findings*
- 3.
- 4. Restrictive Cardiomyopathy: Pathogenesis and Clinical Findings*
- 5.
- 6. Myocarditis

Ischemic Heart Disease: radiating chest pain with dyspnea, tachycardia

- 1. 1
- 2. <u>Stable Angina: Pathogenesis and Clinical Findings</u>
- 2. 2.
- Unstable Angina/Unstable Angina Pectoris: Pathogenesis and clinical findings
- 3. Prinzmetal variant angina
- 4. 4
- 5. <u>Atherosclerosis: Pathogenesis</u>
- 6. Atherosclerosis: Complications
- 7. Myocardial Infarction: Findings on History
- 8. <u>Myocardial Infarction: Findings on Physical Exam</u>
- 9. Myocardial Infarction: Findings on Investigations
 - 10. Myocardial Infarction: Complications

Heart Failure (orthopnea, tachypnea, edema, tachycardia

1.

- a. Left Heart Failure: Pathophysiology (Neurohormonal Activation)
 - i. 2.
 - 1. Left Ventricular Hypertrophy: Pathogenesis
 - ii. 3.
 - 1. <u>Underfill Edema: Pathogenesis</u>
 - 4. Left Heart Failure: Findings on History
 - 5. Left Heart Failure: Physical Exam Findings
 - 6. <u>Left Heart Failure: Findings on Chest X-Ray</u>
 - 7. 7.
 - 8. Right Heart Failure

Pericardial Disease

- Pe<u>ricardial Effusion and Tamponade: Pathogenesis and Clinical Findings</u>
- 2. 2.
- 3. Pericarditis: Pathogenesis and Clinical Findings

c. Abdominal Pain

- 1. Intima disruption
- 2.
- 3. <u>Abdominal Aortic Aneurysm: Pathogenesis and Clinical Findings</u>
- 4.
- 5. <u>Aortic Dissection</u>

d. Hypertension

- 1. Essential
- 2. Secondary
- 3. Malignant
- 4. Hypertensive emergencies

e. Hypotension

- 1. Cardiogenic shock
- 2. Orthostatic hypotension
- 3. Vasovagal hypotension

f. Murmurs

Acyanotic Congenital Heart Disease

- 1.
- 1. <u>Left to Right Congenital Cardiac Shunts: Pathogenesis and Clinical Findings</u>
- 2. 2
- 3. <u>Ventricular Septal Defect (VSD): Pathogenesis and clinical findings</u>
- 4. 3.

- 5. <u>Atrial Septal Defect: Pathogenesis and Clinical Findings</u>
- 6. 4.
- 7. <u>Patent Ductus Arteriosus (PDA): Pathogenesis and Clinical Findings</u>

Valvular Disorders

1.

- 2. <u>Mitral Regurgitation: Pathogenesis and clinical findings</u>
- 3.
- 4. Aortic Stenosis: Pathogenesis and Clinical Findings
- 5.
- 6. <u>Aortic Regurgitation: Pathogenesis and Clinical Findings</u>

7.

8. Mitral Stenosis: Pathogenesis and Clinical Findings

Mitral valve prolapse

Tricuspid stenosis

Tricuspid regurgitation

Pulmonary stenosis

Pulmonary regurgitation

Cyanotic Congenital Heart Disease

9.

- 10. <u>Transposition of the Great Arteries: Pathogenesis and Clinical Findings</u>
- 11.
- 12. Tetralogy of Fallot: Pathogenesis and Clinical findings

g. Systemic (fever, malaise, splinter hemorrhages, dermatologic changes)

- 1.
- 2. Infective Endocarditis
- 3.
- 4. Acute Rheumatic Fever: Pathogenesis and Clinical Findings

h. Shock

- a.
- b. <u>Cardiogenic Shock</u>

i. Dyspnea

Cardiac Tamponade Pericardial effusion

4. Assess a given patient's general risk for cardiovascular disease and provide patient education directed to prevention of these diseases. Evaluation, B2.07f, B2.08b

- Working with the appropriate health care professional, formulate an appropriate non-pharmacotherapeutic and pharmacotherapeutic plan for a patient with hypercholesterolemia and/or hypertriglyceridemia. Synthesis, B2.02d
- 6. Discuss common cardiovascular disorders including congenital in infants and children and acquired presenting in the elderly, their varying presentations and propose a management plan including consideration of age, co-morbidities and polypharmacy. Application, B2.02d, B2.07e, B2.08a
- Working with the appropriate health care professional, develop an appropriate patient education plan as needed. Application, B2.07f
- Working with the appropriate health care professional, recommend an appropriate patient referral plan as needed. Application, B2.07f
- ^{9.} Working with the appropriate health care professional recommend a suitable rehabilitation plan as needed. Application, B2.08b
- Working with the appropriate health care professional recommend a suitable prevention program as needed. Application, B2.08b
- 11. Working with the appropriate health care professional, recommend an appropriate palliative care plan for a patient facing end-of-life decisions. Application, B2.08e
- 12. Select and justify a diagnostic study indicating the relevance, and associated cost/benefit considering their contribution to a diagnosis. Evaluation, B2.07d
- 13. Choose a pharmacotherapeutic intervention relating the indications, contraindications, complications, efficacy and effectiveness of the treatment. Evaluate, B2.02d
- 14. Identify the patient requiring emergent intervention. Evaluation
- Differentiate the evaluation and treatment approach in acute, chronic and emergent cardiovascular disease. Analysis, B2.07e, B2.08b
- 16. Design appropriate treatment plans for patients with chronic cardiovascular disease. Synthesis, B2.07e
- 17. Support the decision to perform the following procedures using knowledge of indications, contraindications, risk/benefit analysis and cost. Analysis, B2.07d
 - a. ECG
 - b. Doppler Pulse Assessment
 - c. Cardiac catheterization
- 18. Demonstrate skills in problem solving and medical decision-making through community learning group case discussions and activities. Application, B2.05
- 19. Demonstrate supportive counseling skills when delivering bad news to a patient. Application, B2.12c

SKILLS OBJECTIVES

Upon completion of this course, the student will demonstrate competence in:

- 1. Eliciting a history. Application, B2.07a
- 2. Performing a complete and focused cardiovascular physical examination. Application, B2.07b

- 3. Performing a 12 lead ECG. Application, B2.09
- 4. Interpreting a 12 lead ECG. Application, B2.09
- 5. Interpreting a CXR. Application, B2.09
- 6. Performing intradermal, subcutaneous and intramuscular injections. Application, B2.09
- 7. Performing intravenous (IV) cannulation. Application, B2.09

Note: Superscripts identify the Bloom's Taxonomy level for each objective

UNIT INSTRUCTION

UNIT	HOURS	LECTURES	LABS
Unit I	5	ORIENTATION	
		PATHOPHYSIOLOGY	
	5	PHYSICAL DIAGNOSIS	Patient History
			Physical Exam
UNIT I EXAM			
Unit II	25	CLINICAL MEDICINE	Patient History
		Signs & Symptoms part 1	Physical Exam
			ECG
UNIT II EXAM			
Unit III	25	CLINICAL MEDICINE	Patient History
		Signs & Symptoms part 2	Physical Exam
			ECG
UNIT III EXAM			

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Note: Texts prefaced with double asterisks are provided in Access Medicine.

ISBN-13: 978-1-260-02650-4

ISBN-10: 0071806008

^{**}Pathophysiology of Disease: An Introduction to Clinical Medicine, 8e by Gary D. Hammer (Author), Stephen J. McPhee (Author) McGraw-Hill.

Bates' Guide to Physical Examination and History Taking, 13th Edition by Lynn S. Bickley. LLW, (2022)

ISBN-13: 978-1496398178 ISBN-10: 1496398173

**DeGowin's Diagnostic Examination, 11e Richard F. LeBlond, Donald D. Brown, Manish Suneja, Joseph F. Szot. McGraw-Hill Education / Medical; 11th edition (2020).

ISBN-10: 0071814477 ISBN-13: 978-1260134872

**Symptom to Diagnosis: An Evidence-Based Guide, 4e.

Scott D. C. Stern, Adam S. Cifu, Diane Altkorn

McGraw-Hill/Lange

ISBN-13: 978-1-260-12111-7

**Harrison's Principles of Internal Medicine 20/E (Vol.1 & Vol.2) 20th Edition by Dennis L. Kasper,

Anthony S. Fauci, Stephen Hauser, Dan Longo, J. Larry Jameson, Joseph Loscalzo

ISBN-13: 978-1259644030 ISBN-10: 0071802150

**Current Medical Diagnosis and Treatment 2021, 60e

Author: Maxine A. Papadakis, Stephen J. Mcphee, Eds. & Michael Rabow, Assoc Ed

Publisher: McGraw-Hill ISBN: 978-1260469868

**Current Diagnosis & Treatment: Cardiology, 5th Edition

Author: Michael Crawford Publisher: McGraw – Hill ISBN 978-1259641251 ISSN 1079-1051

**Tintinalli's Emergency Medicine: A Comprehensive Study Guide, Ninth Edition (Emergency Medicine (Tintinalli)) 9th Edition

by Judith Tintinalli (Author), J. Stapczynski (Author), O. John Ma (Author), David Cline (Author), Rita Cydulka (Author), Garth Meckler (Author)

ISBN-13: 978-1260019933 ISBN-10: 0071484809

Essential Clinical Procedures: 4th Edition by Richard Dehn & David P. Asprey.

(2021) Elsevier Health Sciences (ISBN-13: 978-0323624671

ISBN-10: 1455707813

Rapid Interpretation of EKG's, 6th Edition by Dale Dubin. Cover Publishing Company; 6 edition (October 15, 2000).

ISBN-10: 0912912065

ISBN-13: 978-0912912066

071484809

Recommended: (not available in Access Medicine)

Cecil Essentials of Medicine: Edition 10 Edward J Wing, Fred J. Schiffman Elsevier Health Sciences, (2022)

ISBN-13: 978-0323722711 ISBN-10: 143771899X

Textbook of Physical Diagnosis: History and Examination With STUDENT CONSULT Online Access, 8e (Textbook of Physical Diagnosis (Swartz)) 8th Edition by Mark H. Swartz MD FACP (Author).

Saunders; 8th edition, (2021) ISBN-13: 978-0323672924 ISBN-10: 0323221483

LEARNING MODALITIES

Modalities include lectures, on-line pre-lecture activities, reading assignments, community learning activities, and clinical skills labs. The class schedule and assignments can be found in Canvas.

ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. However, we recognize that as adults you have other life responsibilities and challenges that may interfere. Ultimately you are responsible for your education and your ability to demonstrate mastery of the course and program objectives.

1. You MUST attend:

- PE and clinical skills labs appropriately dressed and with all necessary equipment
- examinations on the date and time for which they are schedule
- Community learning group

2. We expect

- active participation in all class activities.
- completion of all class preparatory assignments prior to commencement of class.
- respect for the class, peers and faculty.
- on-time arrival for all classes, laboratories, learning groups or any scheduled activities.
 Routine tardiness demonstrates a lack of professionalism and will not be tolerated

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. No partial credit will be given for late assignments. Incompletes will only be assigned under extremely unusual circumstances. Late assignments receiving no credit must

still be submitted. Students failing an examination or practicum must complete the designated remediation (See REMEDIATION below) within the assigned time.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examinations (written and practical) **on their respective scheduled days**. No requests for early examinations or alternative days will be approved.

ASSESSMENT AND GRADING

Student course grades are calculated using all assessment tools utilized during the course. These include quizzes, written examinations, written assignments, practicums, and evaluation of skills.

Learning community groups will be utilized to provide case-based instruction. A clinical case will be presented to each group by the group mentor. Students are expected to utilize knowledge acquired from prior readings and lectures, as well as self/group directed learning to work up the case, develop a working diagnosis, a differential diagnosis and a therapeutic regimen which will include a follow-up plan and patient education. Effective interpersonal communication, clinical reasoning and problem solving abilities, professional behavior and teamwork are paramount to success and development as clinicians. Cases will be issued no more frequently than every other week. There will be 2 cases in this module. Students will receive a collective grade for this exercise.

Learning community group performance expectations include; demonstrating effective interpersonal communication, clinical reasoning and problem solving abilities, professional behavior and teamwork skills. Application, B2.05, B4.03b, B4.03c, B4.03e

ACTIVITY	% OF GRADE
Learning Community	5%
Case Study H&P	5%
Written Examinations	50%
Skills OSCE	15%
Patient-centered OSCE	25%

Grading will be in keeping with Point Loma Nazarene University policy for graduate programs and grading will be as follows:

A=93-100	C=73-76
A-=92-90	C-=70-72
B+=87-89	D+=67-69
B=83-86	D=63-66
B-=80-82	D-=60-62
C+=77-79	F=0-59

REMEDIATION

Remediation is the process by which both the student and the program are assured that performance indicating a deficiency in knowledge or skills is subsequently demonstrated to be satisfactory. This may include a re-test over missed material, a skills demonstration or a review of missed material with completion of corrected answers. It is important to note that this is content remediation, not grade remediation and no grade will be changed based on these activities.

Within 48 hours of the posting of a grade of <70%, the student MUST contact the course director to discuss the student's performance and create a remediation plan. Unless otherwise directed by the course director, remediation activities must be completed within 5 days.

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See the <u>Academic Honesty Policy</u> in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the Technical Standards and the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's

specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

This syllabus is subject to change. Students are encouraged to check course messages and emails in order to remain current.

ARC-PA standards (5th edition) addressed in this course: B2.02(a)(b)(c)(d), B2.03, B2.05, B2.07, B2.08, B2.09, B2.12(c), B2.18, B4.03(b)(c)(e)