



**Department of Physician Assistant Education  
Master of Science in Medicine**

**5 units**

**MSM 6600 A Elective Cardiology**

|                                       |                                    |
|---------------------------------------|------------------------------------|
| <b>Course director:</b> <i>Amy Vu</i> | <b>Term:</b> varies                |
| <b>Phone</b> 619-849-7952             | <b>Meeting day &amp; time:</b> TBD |
| <b>Email</b> AVu@pointloma.edu        | <b>Meeting location:</b> TBD       |

**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**

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This is a 5-week, full time elective clinical experience which takes place in a specialty office, hospital setting, or both. The purpose of the Cardiology Elective rotation is to provide the student with practical clinical experience in the evaluation and management of specialty diseases. Students are responsible for any assigned readings and are expected to be familiar with the pathophysiology, medical and surgical treatment options, and expected outcomes for the cases in which they are involved. Students will be expected to mirror the Preceptor's schedule and may be assigned to any shift on any day of the week, including holidays.

**COURSE LEARNING OUTCOMES**

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Within this five-week rotation, the supervised students will:

1. Have the opportunity to expand upon their didactic knowledge of medical conditions that appear in a specialty medicine setting;
2. Learn to synthesize the didactic knowledge and skills gained into clinical applications in situations presented during the rotation;
3. Be provided ongoing opportunities to use the skills they have obtained in the evaluation of medical literature, and its use in evidence-based medicine and research;
4. Have the opportunity to increase their differential diagnoses;
5. Increase their ability to recommend, select and interpret appropriate diagnostic studies;

6. Gain proficiency in the diagnosis and management of conditions commonly encountered in a specialty setting.
7. Have the opportunity to interact with a diverse population of patients in a specialty setting.

## PROGRAM LEARNING OUTCOMES

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*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, PB, SB
2. Prioritize a differential diagnosis following a clinical encounter. MK, IC, PC, PB
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, PR
7. Form clinical questions and retrieve evidence to advance patient care. MK, IC, PC, PR, PB, SB
8. Give or receive a patient handover to transition care responsibilities. MK, IC, PC, PR, PB, SB
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
11. Obtain informed consent for tests and/or procedures. MK, IC, PC, PR, PB
12. Perform the general procedures of a physician assistant. MK, IC, PC, PR, PB, SB
13. Identify system failures and contribute to a culture of safety and improvement. MK, IC, PR, PB, SB

*Initials indicate PA core competency required to meet the PLO.*

PA Core Competencies:

MK = Medical Knowledge

IC = Interpersonal Skills & Communication

PC = Patient Care

PR = Professionalism

PB = Practice-based Learning

SB = Systems-based Practice

## INSTRUCTIONAL OBJECTIVES

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The following are the required learning objectives for the Internal Medicine rotation. Students are responsible for meeting these objectives whether or not clinical examples are seen during the rotation experience. At the conclusion of the rotation, it is expected that the student will be able to do the following:

### Alignment to Core Competencies and Program Learning Outcomes

| Core Competencies | Specific Learning Objectives   | PLOs    |
|-------------------|--|---------|
| Medical Knowledge | <ul style="list-style-type: none"> <li>● Fund of medical knowledge regarding common medical problems is sufficient for patient care.</li> <li>● Order and interpret laboratory, diagnostic and screening studies commonly used in a specialty setting.</li> <li>● Develop an appropriate differential diagnosis for common acute and chronic medical conditions</li> <li>● Develop an appropriate treatment/management plan for patient in a specialty setting.</li> </ul> | 1,2,3,7 |

|   |  |                |
|---|--|----------------|
| Patient Care                            | <ul style="list-style-type: none"> <li>● Gather and record complete and accurate histories on patients in a specialty setting.</li> <li>● Perform and record a comprehensive or focused physical exam on a patient in a specialty setting.</li> <li>● Generate differential diagnoses based on the history, the physical examination, results of any diagnostic studies performed, and clinical knowledge of common specialty conditions.</li> <li>● Differentiate between the patient requiring urgent care and an emergent condition and initiate management as appropriate.</li> <li>● Demonstrate procedural skills as appropriate for a specialty setting.</li> </ul> | 1,2,3,4,5,6    |
| Practice-Based Learning and Improvement | <ul style="list-style-type: none"> <li>● Obtain, analyze, and use the medical literature and other information resources to address medical questions and to sustain professional growth</li> <li>● Identify individual learning goals, self-assess knowledge and behaviors.</li> </ul>  | 2,3,4,6,7,8    |
| Interpersonal and Communication Skills  | <ul style="list-style-type: none"> <li>● Presents cases accurately reflecting chronology, details of physical findings, differential diagnoses, lab or imaging results and proposed treatment plan</li> <li>● Written documentation is clear, concise, accurate and organized.</li> <li>● Communicate effectively with patients, families and other caregivers.</li> <li>● Educate patients and families regarding common specialty conditions.</li> <li>● Check for patient's understanding of follow-up plan, including treatments, testing, referrals, and continuity of care.</li> </ul>   | 1,4,5,6,8,9, 1 |
| System Based Practice                   | <ul style="list-style-type: none"> <li>● Contribute to a culture of safety and improvement by identifying actual or potential system failures and notify the responsible person.</li> <li>● Identify proper referral strategies for patients to other services for clinical interventions as appropriate.</li> </ul>   | .3             |
| Professionalism                         | <ul style="list-style-type: none"> <li>● Works well within team assuming responsibility when appropriate.</li> <li>● Demonstrate respect, honesty, integrity and adherence to ethical behavior and legal standards</li> <li>● Punctual for all scheduled events meeting all deadlines; dependable and communicates promptly when delayed</li> </ul>  | ,5,6,8,9       |

### Alignment of Organ System Based Conditions

For the following conditions the student must define the etiology, identify the signs and symptoms, generate appropriate differential diagnoses, recommend a diagnostic work up, recognize risk factors and recommend prevention strategies, treatment and provide patient education as appropriate. Students

are responsible for this knowledge whether or not clinical examples are seen during the rotation experience.

| Organ          | Symptoms   | Conditions  |
|----------------|--|---|
| Cardiovascular | Chest pain<br>DOE<br>SOB<br>Palpitations<br>Syncope<br>Fever<br>Claudication<br>Cyanosis | Angina pectoris<br>Cardiac arrhythmias /conduction disorders<br>Cardiomyopathy<br>Chest pain<br>Congestive heart failure<br>Coronary vascular disease<br>Endocarditis<br>Hyperlipidemia<br>Heart murmurs<br>Hypertension<br>Hypertriglyceridemia,<br>Myocardial infarction<br>Myocarditis<br>Pericarditis<br>Peripheral vascular disease,<br>Rheumatic fever<br>Rheumatic heart disease,<br>Valvular heart disease<br>Vascular disease<br><br>Atrial septal defect<br>Coarctation of the aorta<br>Patent ductus arteriosus<br>Tetralogy of Fallot<br>Ventricular septal defect<br>Acute rheumatic fever<br>Kawasaki disease<br>Hypertrophic cardiomyopathy<br>Syncope |

## RECOMMENDED STUDY RESOURCES

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**Note:** Although there are no required textbooks for these rotations, students are encouraged to use textbooks and resources that are pertinent to the discipline of their study. In addition, the resources below are recommended for this rotation.

Recommended downloads for handheld devices:

- Epocrates
- Medscape
- PubSearch

- Medical Calc

NOTE: Individual preceptors may include other resources. You will be notified of these resources by each preceptor. *If your preceptor does not offer additional resources, ask them what resources they like to use.*

## **ASSESSMENT AND GRADING - ROTATION EVALUATION PROCESS**

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Students must maintain a grade of 70% or better throughout the clinical year. A final score below 70% is considered failing. Grades are calculated on a percentage basis. All final course grade percentages are rounded to the nearest number. Rotation assessment grades are based on the following standards:

|                             |     |
|-----------------------------|-----|
| Rotation Preparatory Exam   | 20% |
| Written Assignment          | 30% |
| End of Rotation Examination | 35% |
| Preceptor Evaluation        | 15% |
| Total 100%                  |     |

- A. Rotation Preparatory Exam: An open source, written assessment used to evaluate the student's current level of knowledge prior to the end of rotation examination. Comprised of multiple-choice questions with content based on the rotation's instructional objectives appropriate, the student is expected to complete the questions with a grade of 85% and submit it at the completion of the rotation.
- B. Written Assignment: At the end of this clinical rotation, the student will be required to submit a complete written History and Physical. This written assignment is one of the tools used to assess how well the PA student gathers, synthesizes, and documents the important information necessary to care for the patient.
- C. End of Rotation Examination: A comprehensive written assessment to determine if the student has met the goals and objectives outlined for the clinical rotation.
- D. The Preceptor Evaluation of the Student is graded on a Pass/Fail basis and is worth 15% of the course grade. Overall rotation grade at "novice" in any of the main competency areas will result in a failing mark for the Preceptor Evaluation
  - a. Medical Knowledge
  - b. Patient Care

c. Interpersonal and Communication Skills

**In addition, any student who receives a failing mark for the Preceptor Evaluation will be referred to the SPPC for review:**

**E.** In addition, any of the following may be criteria for failing the rotation:

- Failure of course components with a grade < 70%
- Failure to log and submit electronic entries and patient encounters
- Failure to submit student evaluation of preceptor and clinical site
- Unacceptable evaluation for professionalism (*refer to Clinical Manual*)
- Excessive or unexcused absences from the rotation site (*refer to Clinical Manual*)

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

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

### **INCOMPLETES AND LATE ASSIGNMENTS**

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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.

### **REMEDIATION**

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If a student's final grade falls below the required 70% needed to pass the rotation or the student receives a failing rotation evaluation, the student's case will be referred to the MSM PA Program Student Progress and Promotion (SPPC) Committee. During the Clinical Phase, students have the opportunity to retake a maximum of one (1) failed EOR exam. Due to the unique nature of the clinical year, the dialed exam must be retaken within 7 days of notification of the failed exam. Students have the opportunity to repeat only one (1) failed rotation. The PA SPPC committee will consider requests for remediation plans and/or recycle options and make these recommendations to the full PA program faculty. For further details on this process, please refer to the *PLNU PA Program Student Handbook*.

## **END OF ROTATION STUDENT EVALUATIONS**

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All students are expected to complete the evaluations of their preceptor and clinical site the week preceding the completion of their rotations. Failure to submit the evaluation will result in a failing grade for the rotation. These evaluations, which are delivered online, are an important part of rotation assessment and improvement efforts, so your cooperation in completing them is greatly appreciated.

## **PLNU COPYRIGHT POLICY**

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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**

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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, 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 Academic Policies in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

## **PLNU ACADEMIC ACCOMMODATIONS POLICY**

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While all students are expected to meet the minimum standards for completion of this course as established by 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](mailto: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.

## **PLNU ATTENDANCE AND PARTICIPATION POLICY**

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Regular and punctual attendance at all rotations is considered essential to optimum academic achievement. Therefore, regular attendance and participation during each rotation are minimal requirements.

If the student is absent for more than 10 percent of their rotation, the faculty member will issue a written warning of de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university withdrawal date or, after that date, receive an "F" grade.

Students who anticipate being absent for an entire week of a course should contact the instructor in advance for approval and make arrangements to complete the required coursework and/or alternative assignments assigned at the discretion of the instructor. Acceptance of late work is at the discretion of the instructor and does not waive attendance requirements.

Refer to [Academic Policies](#) for additional detail.

**ARC-PA standards (4th edition) addressed in this course: B3.02 (preventive, emergent, acute, chronic) B3.03a (adults, elderly), B3.04c (inpatient), B3.07b (IM)**

## **SPIRITUAL CARE AND CHAPLAIN SERVICES**

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PLNU strives to be a place where you grow as a whole person. To this end we provide resources for our Graduate students to encounter God and grow in their Christian faith. We have an onsite chaplain, Rev. Gordon Wong, at the Mission Valley (MV) campus to service Graduate students at the Mission Valley and Balboa Campuses. Rev. Gordon Wong is available during class break times across the week. If you have questions for, desire to meet with, or want to share a prayer request with Rev. Wong you can contact him directly at [mvchaplain@pointloma.edu](mailto:mvchaplain@pointloma.edu) or [gordonwong@pointloma.edu](mailto:gordonwong@pointloma.edu). Rev. Wong's cell number is 808-429-1129 if you need a more immediate response.

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