



Department of Physician Assistant Education
Master of Science in Medicine
5 units

MSM 6506 EMERGENCY MEDICINE

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COURSE DESCRIPTION

This is a 5-week, full time required clinical experience during which the student will have the opportunity to evaluate and treat a wide variety of urgent, emergent, and life-threatening conditions in patients across the lifespan from infant to elderly. The student will learn to triage patients, interact with patients' families, and become more proficient at taking rapid accurate histories, performing physical examinations, ordering appropriate diagnostic tests, and formulating a treatment plan. The student will have the opportunity to make oral presentations to preceptors. 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 GOALS

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

1. Have the opportunity to expand upon their didactic knowledge of physical and psychological conditions that appear across the life span acutely in an emergency 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 emergency medicine.
7. Have the opportunity to interact with a diverse population of patients and a variety of disorders involving all organ systems commonly encountered in the emergency medicine environment.

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, 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

The following are the required learning objectives for the Emergency 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 Objective	PLOs
Medical Knowledge	<ul style="list-style-type: none"> • Interpret the clinical features, develop a differential diagnosis, and plan management of common acute conditions seen in the emergency department from across the lifespan. • Recognize the impact of disease on individuals and societal levels. • Compare preventive strategies for common acute conditions seen in the emergency department, and at the population level. 	1,2,3,7,10
Patient Care	<ul style="list-style-type: none"> • Gather histories and perform physical exams relevant to common acute medical conditions. 	1,2,3,4,5,6,8, 10, 12

	<ul style="list-style-type: none"> • Formulate treatment plans for common acute ambulatory medical problems. • Select appropriate pharmacologic agents used in the emergency department based on patient presentation and clinical findings. • Generate clinical questions from patient presentations using current evidence to support clinical decision making. • Triage patients appropriately recognizing those needing immediate care from those urgent or acute care. • Recommend screening and diagnostic studies based on risk/benefit to patient • Demonstrate procedural skills as appropriate for the clinical setting. 	
Practice-Based Learning & Improvement	<ul style="list-style-type: none"> • Practice life-long learning skills, including the use of evidence-based medicine at point of care. • Differentiate and appraise preventive service guidelines and recommendations from various organizations. • Identify individual learning goals, and self-assess knowledge and behaviors 	2,3,4,6,7,8
Interpersonal & Communication Skills	<ul style="list-style-type: none"> • Present cases to preceptor in a patient-centered manner, integrating further testing recommendations, diagnostic probabilities, and evidence-based treatment recommendations as indicated. • Obtain verbal and written consent for any tests, examinations, and/or procedures that are performed in the clinic, and educate the patient on tests and procedures to be performed • Collaborate as a professional team member when interacting with other medical care givers and demonstrate professionalism through respect, compassion, accountability, dependability, and integrity. • Document clinical encounter in written SOAP note form. • Establish effective relationships with patients and families ensuring that they understand the treatment plan, potential complications and return instructions. • Educate patients and families regarding prevention strategies for common traumatic injury and other common emergencies. • Demonstrate the process of negotiating management plans with patients, incorporating patient needs and preferences into care. 	1,4,5,6,8,9,11
System Based Practice	<ul style="list-style-type: none"> • Contribute to a culture of safety and improvement by identifying actual or potential system failures and notify the responsible person. • Identify proper referral strategies for patients to other services for clinical interventions as appropriate. 	13
Professionalism	<ul style="list-style-type: none"> • Advocate for effective care for the underserved 	1,5,6,8,9

	<ul style="list-style-type: none"> • Demonstrate respect, compassion, accountability, dependability, and integrity when interacting with peers, interprofessional healthcare providers, patients, and families • Recognize and maintain appropriate boundaries with patients (e.g., disclosure, time, intimacy, gifts) and other health care professionals (e.g., disclosure, dating) • Demonstrate punctuality, reliability, preparedness, initiative, and follow-through • Display professional dress, hygiene, language, demeanor, and behavior during work hours • Approach all actions with integrity, honesty, and authenticity • Display integrity of authorship for clinical notes, presentations, papers, and research • Acknowledge gaps in skills, knowledge, or patient information, and seek help when needed • Maintain patient confidentiality and respect patient privacy • Recognize personal transgressions toward others (rudeness, losing one’s temper), seek advice and make amends as appropriate 	
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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 System	Symptom	Diagnosis
Gastrointestinal /Nutritional	Abdominal pain, anorexia, heartburn/dyspepsia, nausea/vomiting, jaundice, hematemesis, diarrhea/constipation /change in bowel habits, melena/hematochezia bleeding per rectum	Acute appendicitis, Acute cholecystitis, Acute hepatitis, Acute pancreatitis, Cholangitis, Cholelithiasis/choledocholithiasis, Diverticular disease, Esophagitis, Gastritis Gastroenteritis, GI bleeding, Giardiasis/parasitic disease Hemorrhoids (thrombosed) Hernia (incarcerated/strangulated) Infectious diarrhea, , Inflammatory bowel disease

		<p>Ischemic bowel disease, Mallory-Weiss tear, Obstruction (small bowel, large bowel, volvulus) parasitic infections, Pyloric stenosis, Peptic ulcer disease,</p>
Cardiovascular	<p>Chest pain, dyspnea on exertion, Palpitations SOB, Orthopnea syncope,</p>	<p>Arrhythmias, Angina Cardiac tamponade Conduction disorders <ul style="list-style-type: none"> o atrial fibrillation/flutter, o supraventricular tachycardia, o bundle branch block, o ventricular tachycardia/fibrillation o premature beats Coronary heart disease <ul style="list-style-type: none"> o non-ST acute myocardial infarction, o ST segment elevation o acute myocardial infarction, angina pectoris, o unstable angina, Prinzmetal/variant angina Hypertensive emergencies Hypotension <ul style="list-style-type: none"> o cardiogenic shock, o orthostatic hypotension) Heart failure Pericardial effusion Peripheral vascular disease, Vascular disease <ul style="list-style-type: none"> o aortic aneurysm/dissection, arterial o occlusion/thrombosis o phlebitis Valvular disease <ul style="list-style-type: none"> o aortic stenosis, o aortic regurgitation, o mitral stenosis, mitral regurgitation) o Acute/subacute bacterial endocarditis </p>
Pulmonology	<p>Chest pain, Cough, Fatigue, Fever Respiratory distress</p>	<p>Acute bronchiolitis Acute bronchitis Acute epiglottitis Acute respiratory distress syndrome Asthma Croup</p>

	Shortness of breath, Stridor, Wheezing,	Foreign body aspiration Hemoptysis Influenza Lung cancer Pertussis Pleural effusion Pleuritic chest pain Pneumonia (bacterial, viral, fungal, human immunodeficiency virus-related) Pneumothorax Pulmonary embolism Respiratory syncytial virus Tuberculosis
Endocrine	fatigue, heat/cold intolerance, palpitations, polyurea Tremors,	Adrenal insufficiency Cushing disease, Diabetes insipidus, Diabetes mellitus, Diabetic ketoacidosis Hyperparathyroidism, Hyperthyroidism, Hypothyroidism Nonketotic hyperglycemia, Thyroiditis
Urology/Renal	Dysuria Edema, Hematuria Incontinence Suprapubic/flank pain	Acid/base disorders, Acute/chronic renal failure, Cystitis, Epididymitis, Fluid and electrolyte disorders, Glomerulonephritis, Hernias Nephrolithiasis, Orchitis, Prostatitis, Pyelonephritis Testicular torsion, Urethritis,
Neurology	loss of consciousness/ change in mental status Loss of coordination/ ataxia, Loss of memory, Numbness/paresthesia Seizure (symptom) Vertigo Weakness/paralysis,	Altered level of consciousness/coma, Bell Palsy Encephalitis Epidural/subdural hematoma, Guillain-Barre syndrome, Head trauma/ concussion/ contusion, Headache (migraine, cluster, tension, acute glaucoma) Intracerebral hemorrhage, Meningitis, Seizure disorders, Spinal cord injury,

		<p>Status epilepticus Stroke, Sub arachnoid hemorrhage/ cerebral aneurysm Transient ischemic attack,</p>
Dermatology	<p>Blisters, Discharge, Fever Lacerations, Pruritus, Rash, Redness/erythema,</p>	<p>Bullous pemphigoid, Burns, Cellulitis, Dermatitis (eczema, contact) Drug eruptions, Erysipelas, Impetigo, Lice, Pilonidal disease, Pressure sores Scabies zoster, Spider bites Stevens-Johnson syndrome, Toxic epidermal necrolysis, Urticaria,</p>
Hematology	<p>Easy bruising/bleeding, Fatigue</p>	<p>Acute leukemia, Anemia, Aplastic anemia, Clotting factor disorders Hemolytic anemia, Hypercoagulable states, Lymphomas, Polycythemia Sickle cell anemia/crisis Thrombocytopenia,</p>
Ob/Gyn	<p>Abdominal/pelvic pain, Amenorrhea, Fever Vaginal discharge,</p>	<p>Dysfunctional uterine bleeding, Ectopic pregnancy Endometriosis, Fetal distress Intrauterine pregnancy, Mastitis/breast abscess Ovarian Cysts Pelvic inflammatory disease, Placenta abruption Placenta previa Premature rupture of membranes, Spontaneous abortion, Vaginal discharge Vaginitis</p>
Orthopedics and Rheumatology	<p>Ecchymosis/erythema, Numbness/tingling Pain, Fever, Swelling/deformity,</p>	<p>Back strain/sprain, Bursitis/tendonitis Cauda equine, Compartment Syndrome</p>

		<p>Costochondritis, Fractures/dislocations shoulder, ankle/foot, forearm/wrist/hand, hip/knee Gout, Herniated disk, Low back pain, Osteomyelitis, Septic arthritis, Soft tissue injuries, Lacerations Animal bites Sprains/strains,</p>
EENT/Ophthalmology	<p>Ear pain, Eye pain Muffled voice, Nasal congestion, Sore throat, Vertigo Vision loss,</p>	<p>Acute laryngitis, Acute pharyngitis (bacterial/viral), Acute sinusitis, Allergic rhinitis Barotrauma, Blepharitis, Conjunctivitis Blow-out fracture, Corneal abrasion/ulcer Dacryoadenitis, Dental abscess, Epiglottitis, Epistaxis Foreign body (eye, ear, nose) Glaucoma (acute angle closure), Hyphema, Labyrinthitis Macular degeneration (wet) Mastoiditis, Optic neuritis, Orbital cellulitis, Otitis externa otitis media, Papilledema, Peritonsillar abscess Retinal detachment, Retinal vein occlusion, Trauma/hematoma (external ear), TM perforation,</p>
Psychiatry /Behavioral Health	<p>Confusion Extreme mood changes Fatigue/low energy Sadness Unusual fears</p>	<p>Anxiety disorders Bipolar and related disorders Depressive disorders Neurocognitive disorders Panic disorder</p>

	Disordered thinking/ delusions/paranoia Extreme impulsiveness Excessive anger/hostility Suicidal ideation	Posttraumatic stress disorder Schizophrenia spectrum and other psychotic disorders Spouse or partner neglect/violence Substance use disorders Suicide
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* Based on PAEA examination

RECOMMENDED STUDY RESOURCES

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. The titles below are recommendations provided through Access Medicine.

**Title: Current Medical Diagnosis & Treatment Emergency Medicine, 8th Edition

Author: C. Keith Stone, Roger L. Humphries

Publisher: McGraw – Hill

ISBN 978-0-07-184061-3

ISSN 0894-2293

**Title: Clinician's Pocket Reference

Author: Leonard Gomella MD, FACS

Publisher: McGraw-Hill

ISBN: 978-00711602822

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.*

HEALTH PROMOTION & DISEASE PREVENTION OBJECTIVES

1. Define primary, secondary and tertiary prevention.
2. Identify patients at risk for the diseases listed above and discuss appropriate screening methods.
3. Provide patient counseling including education on patients at risk for the chronic conditions listed above to delay disease progression.
4. Apply current CDC guidelines for adult immunization.

5. Provide patient education of adults and elders relative to the most common injuries and illness in a given age group.

ROTATION EVALUATION PROCESS

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%
End of Rotation OSCE Skills Exam	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.** End of Rotation OSCE: This performance-based test is used to objectively measure the student's clinical competence. During the OSCE, students will be observed and evaluated as they address a clinical issue or skill relevant to the student's completed rotation.
- 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 = 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

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.

REMEDIATION

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 clerkship. 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

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

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, 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

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 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.

ARC-PA standards (4th edition) addressed in this course: B3.02 (preventive, emergent, acute, chronic) B3.03a (lifespan), B3.04b (emergency)

SPIRITUAL CARE AND CHAPLAIN SERVICES

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 or 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.