

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

MSM 6502 PEDIATRIC MEDICINE

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COURSE DESCRIPTION

This 5-week, full time required clinical practicum that focuses on the evaluation, diagnosis, and management of acute and chronic medical conditions in the pediatric population from newborn to adolescence in the inpatient or outpatient setting. Students will perform complete history and physical exams. Students will demonstrate how to order and interpret diagnostic tests commonly utilized in pediatrics and to perform common procedures. 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:

- Have the opportunity to expand upon their didactic knowledge of physical and psychological conditions that appear both acutely and chronically in the pediatric 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 pediatric 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 pediatric 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. $^{\mbox{\scriptsize MK, IC, PC, PR, PB}}$
- 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 Pediatric 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:

Core	Specific Learning Objectives	PLOs
Competencies		
Medical	 Apply knowledge of normal patterns of physical, 	1,2,3,7,10,
Knowledge	cognitive and behavioral growth with consideration	11,12,13
	of age-appropriate developmental milestones	

Alignment to Core Competencies and Program Learning Outcomes



LINU		
	 during preventive care in infants, children, and adolescents. Describe common pediatric disease entities as listed below, including their characteristic signs and symptoms, etiology, epidemiology, relationship to age of the child and pathophysiology and apply that knowledge to the generation of differential diagnoses. Order and interpret appropriate diagnostics, lab tests, imaging studies based on the child's history, age and physical examination findings Make informed decisions concerning diagnostic and therapeutic interventions based on patient's age, current evidence-based practices, and clinical judgment. Identify social, economic, psychological, and cultural factors that contribute to pediatric health and disease. Selects pharmacologic agents with attention to the age of the patient, common side effects, drug interactions, allergies and Black Box warning using pediatric dosing parameters. 	
Patient Care	 Gather an accurate, complete newborn, infant, child or adolescent history from the caregiver or child including history pertaining to prenatal and perinatal care, feeding, growth and developmental milestones, past illness, immunization status, diet, sleep habits, safety issues, and substance use/exposures Perform a physical exam on the Well Child or problem focused visit, appropriate to the age of the infant, child or adolescent. Generate differential diagnoses based on the history, the physical examination, results of any diagnostic studies performed, and clinical knowledge of common pediatric disorders as listed in the topic list below Conduct age-appropriate screenings and periodic health assessments, including adolescent screening for sexual development, pregnancy, birth control, substance use, suicide, eating disorders, and depression Provide and document anticipatory guidance and disease prevention to parents appropriate to the 	1,2,3,7,8,9 ,11,12,13



Direction Decod	 age of the infant, child or adolescent Provide education in the care of common acute and chronic pediatric illnesses listed below. Recognize the sick child needing emergent care and differentiate between those needing preventative, chronic, and acute care. Obtain informed consent when appropriate Demonstrate procedural skills as appropriate for the clinical setting. 	12470012
Practice-Based Learning and Improvement	 Obtains, analyzes, and uses the medical literature and other information resources to address medical questions and to sustain professional growth Identify strengths and weaknesses in knowledge and skills based on critical reflection and self-evaluation. Solicit, accept, and act on preceptor feedback to effectively make improvements. 	1,3,4,7,8,9,12, 13
Interpersonal Communication Skills	 Presents cases accurately reflecting chronology, details of physical findings, differential diagnoses, lab or imaging results and proposed treatment plan Written documentation is clear, concise, accurate and organized. Communicate effectively with patients, families and other care givers. Educate patients and families regarding common acut and chronic medical conditions. Check for patient's understanding of follow-up plan, including treatments, testing, referrals, and continuity of care. 	1,2,3,4,5,6,7,8, 9,10,11,12,13
Systems Based Practice	 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	 Works well with team assuming responsibility when appropriate. Demonstrate respect, honesty, integrity and adherence to ethical behavior and legal standards Punctual for all scheduled events meeting all deadlines; dependable and communicates promptly when delayed 	9,11,12,13



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	Symptoms	Conditions
EENT	eye discharge	Pharyngitis/tonsillitis
	eye pain	Conjunctivitis
	decreased vision	Laryngitis
	ear pain	Otitis externa
	ear discharge	Otitis media
	sore throat	Hearing impairment
	sneezing	Tympanic membrane perforation
	rhinorrhea	Allergic rhinitis
		Epistaxis
		Epiglottitis
		Oral candidiasis
		Peritonsillar abscess
		orbital cellulitis
		strabismus
		corneal abrasion
Pulmonology	cough	Asthma
	SOB	Bronchitis
	fever	Acute bronchiolitis
	stridor	Pneumonia
	wheeze	Croup
		Foreign body
		Hyaline membrane disease
		Cystic Fibrosis
CV	chest pain	Atrial septal defect
	SOB	Coarctation of the aorta
	cyanosis	Patent ductus arteriosus
		Tetralogy of Fallot
		Ventricular septal defect
		Acute rheumatic fever
		Kawasaki disease
		Hypertrophic cardiomyopathy
		Syncope
GI/Nutritional	abdominal pain	Dehydration
	diarrhea	Colic
	constipation	Constipation



	fever	Gastroenteritis
	N/V	Intussusception
	jaundice	Inflammatory bowel disease,
		Appendicitis
		Encopresis
		Duodenal atresia
		Hepatitis
		Giardiasis and other parasitic infections,
		Hiatal hernia
		Gastroesophageal reflux disease
		Irritable bowel syndrome.
		Hirschprung Disease
		Niacin Deficiency
		Vitamins A, C, and D Deficiencies
		Inguinal Hernia
		Umbilical Hernia
		Lactose intolerance
Ortho/	pain	Nursemaid elbow
Rheum	deformity	Slipped capital femoral epiphysis
RIIEUIII	swelling	Osgood-Schlatter
	arthralgias	Scoliosis
	ur thruighus	Congenital hip dysplasia
		Avascular necrosis of proximal femur
		Neoplasia of MSK system
		Juvenile rheumatoid arthritis
Hematology/Oncology	fatigue	Anemia
	fever	Leukemia
	bruising easily	Bleeding disorders
	bleeding	Lymphoma
		Neutropenia
		Brain tumors
		Hemophilia
		Lead poisoning
Endo	polyuria	Diabetes mellitus
	polyphagia	Hypercalcemia
	heat/cold	Obesity
	intolerances	Short stature
		Hyperthyroidism
		Hypothyroidism
Infectious	fever	Atypical mycobacterium disease
	pain	Pinworms
	erythema	Epstein-Barr Virus
		Erythema infectiosum
	cough	El ythema infectiosum



		Herpes Simplex
		Influenza
		Mumps
		Roseola
		Measles
		Varicella
		Pertussis
		Coxsackie Virus
		Meningitis
Neurology	altered mental	Teething
Neurology	status fever	Febrile seizure
	lethargy	Seizure disorders
	lethalgy	
		Meningitis
		Turner Syndrome
		Down Syndrome
Urology/	abdominal pain	Cryptochordism
Renal	testicular pain	Hydrocele
	dysuria	Paraphimosis
	hematuria	Phimosis
		Testicular torsion
		Enuresis
		Hypospadias
		Vesicourethral reflux
		Glomerulonephritis
		Cystitis
Dermatologic	pruritis	Dermatitis (diaper, perioral)
	erythema	Atopic Dermatitis
	rash	Drug eruptions
	pustules	Lichen planus
		Pityriasis rosea
		Psoriasis
		Erythema multiforme
		Stevens-Johnson syndrome
		Toxic epidermal necrolysis
		Scabies
		Acne vulgaris
		Lice
		Spider bites
		Androgenetic Alopecia
		Exanthems
		Molluscum contagiosum
		Verrucae
		Impetigo
	1	Urticaria



		Vitiligo Tinea
Psychiatry	variable	Child abuse and neglect ADD/ADHD Autism spectrum Feeding or eating disorders Depressive disorders Anxiety disorders Disruptive, impulse-control, and conduct disorders Suicide

* 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 Diagnosis and Treatment Pediatrics, 24th ed Author: Hay et al.
Publisher: Lange
ISBN 978-1-259-86290-8
ISSN 0093-8556

**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. Identify patients at risk for the diseases listed above and discuss appropriate screening methods.
- 2. Provide patient counseling including education on patient risk for the chronic conditions listed above to ameliorate disease progression.
- 3. Apply current guidelines for pediatric immunization
- 4. Provide patient education of pediatrics relative to the most common injuries and illness in a given age group.
- 5. Provide patient education pediatric immunizations.
- 6. Identify health risks, including accidental and non-accidental injuries and abuse or neglect and provide patient and family education
- 7. Identify development stages and detect deviations from the anticipated growth and development levels.
- 8. Identify, perform and interpret recommended age-appropriate screenings.
- 9. Communicate effectively with children, teens and families.
- 10. Provide anticipatory guidance to families based on the child's age and developmental stage.

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.



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 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 <u>dis</u>honesty 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 gualified 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 (infants, children, adolescents), B3.04a,c (outpatient/inpatient), B3.07d (pediatrics)

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 <u>mvchaplain@pointloma.edu</u> or <u>gordonwong@pointloma.edu</u>. 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.