

**UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE
DEPARTMENT OF PEDIATRICS**

PEDIATRICS ELECTIVE COURSES CATALOG

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COURSE NAME: MPED 7010 - **General Pediatrics Junior Internship**

COURSE COORDINATOR: Belinda Beauchamp, MD

COURSE DESCRIPTION:

The student will demonstrate the acquisition of knowledge and skills necessary to work on the diagnosis and management of the most common pediatric conditions. He/she will attend activities held at wards for hospitalized patients. This rotation provides experience for the medical student in an in-patient setting. The rotation will prepare students for patient care in the in-patient setting that they may experience during residency and beyond. Students are scheduled to see patients from 0-18 years with a variety of diseases. All clinical care is supervised by attending and residents. Student must attend all didactic activities and they are expected to work as an intern in pediatrics.

DURATION: 160 hours; four full time weeks

PREREQUISITE: Have completed third year Pediatric Clerkship

ENROLLMENT: 4-5 students per month

DATES OFFERED: Throughout the Year

HOSPITALS:

University Pediatric Hospital (UPH)

San Juan City Hospital

University of Puerto Rico Hospital, Carolina

NIGHT DUTIES: Yes

EVALUATION:

The student will be evaluated by direct observation in process of how he/she will gather data by history, physical examination and diagnostic studies. Also the student will be expected to use critical thinking in the process of assessing data and arriving at a diagnosis. He/she will also be evaluated on how he/she manages problems and maintain health. In general, work habits and personal qualities in his/her relationship with patients, families and other member of the health team will also be observed and evaluated. The student must attend all academic activities. The academic activities are all didactic activities, daily ward rounds with attending and night shifts with senior resident and/or chief resident.

COURSE NAME: MPED 7015-2 -Introduction to Care of High Risk Infant

COURSE COORDINATOR: Dr. Marta Valcárcel

Alternate: Dr Inés García and Dr. Juan Rivera

COURSE DESCRIPTION:

The student will acquire knowledge and skills in the detection and management of the high risk infant. The educational activities will consist of case demonstrations about the high risk infant and discussions during daily medical rounds in the Neonatal Intensive Care Unit. Special emphasis will be made in the care of the acutely ill patient. An opportunity will be available for the student to learn about clinical problems that require intensive care; specially identifying risk factors and prevention. **DURATION:** 160 hours; four full time weeks

PREREQUISITE: have completed third year Pediatric and OB-Gyn courses

ENROLLMENT: 2 students per rotation

DATES OFFERED: Throughout the Year

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: Daily work

COURSE NAME: MPED 7018-2 -Introduction to Pediatric Cardiology

COURSE COORDINATOR: Dr. Olga Joglar

COURSE DESCRIPTION: This course consists of the evaluation of hospitalized, ambulatory and surgical patients served by the Pediatric Cardiology Section. Emphasis will be placed on electrocardiography and echocardiography interpretation, cardiac catheterization and the correlation of these with the clinical diagnosis and physiologic data.

In keeping with the new techniques available in the field of Pediatric Cardiology, the students should get involved and exposed to new non-invasive diagnostic tools such as echocardiography, ambulatory electrocardiography and stress tests.

The student will acquire knowledge and skills in the detection and management of the high risk infant. The educational activities will consist of case demonstrations about the high risk infant and discussions during daily medical rounds in the Neonatal Intensive Care Unit. Special emphasis will be made in the care of the acutely ill patient. An opportunity will be available for the student to learn about clinical problems that require intensive care; specially identifying risk factors and prevention.

DURATION: 80-160 hours; two to four full time weeks

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 2 students per rotation

DATES OFFERED: Throughout the Year, except December

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: Oral exam, case presentation and discussions

COURSE NAME: MPED 7019-1 Emergency Room

COURSE COORDINATOR: Dr. Milagros Martín de Pumarejo

COURSE DESCRIPTION: The student will attend activities related to the evaluation of children at the Emergency Room. The student will acquire knowledge and skills in the diagnosis, evaluation and management of the most common acute pediatric and surgical conditions. Attending physician on site 24 hours. The student can also observe and perform under supervision some common pediatric procedures such as: spinal tap, venipuncture, suprapubic tap, urine catheterization, arterial blood gases, CPR, endotracheal intubation, etc. Educational activities will include daily ward rounds in the observation area, discussion of the walk-in patient, evaluation and discussion of the critical-ill child.

DURATION: 80-160 hours; two to four full time weeks

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 2 students per two weeks in each rotation

DATES OFFERED: Throughout the Year

HOSPITALS:

University Pediatric Hospital (UPH)

San Juan City Hospital

NIGHT DUTIES: Yes, Shifting rotation: first week: 7:30 am - 7:30 pm; second week: 7:30 pm - 7:30 am

EVALUATION: Performance, attitudes, quality of work ups and procedures

COURSE NAME: MPED 7019-2 –Neurodevelopmental Pediatrics

COURSE COORDINATOR: Dr. Noelia González

COURSE DESCRIPTION: He/she will be exposed to developmental behavioral and learning disorders as well as patients with cerebral palsy, defects in the central palsy, defects in the central nervous system and other congenital and metabolic disorders associated with developmental disorders.

DURATION: 80 hours; two full time weeks

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 2 students per two week rotation

DATES OFFERED: Throughout the Year, except July and December

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: Performance, attitudes, quality of work ups and procedures

COURSE NAME: MPED 7019-3 – Nursery (Stabilization Neonatal Care Unit - UDH)

COURSE COORDINATOR: Dr. Maria Quintero

COURSE DESCRIPTION: The student will participate in activities related to the evaluation and care of the normal newborn nursery from birth until discharge. These experiences will represent the daily care, management and diagnosis of conditions related to the newborn (including jaundice, mild respiratory distress, infections, neonatal withdrawal syndrome among others). The student will participate in the care of normal newborn babies including breastfeeding orientation to the new mothers and he/she will educate parents on guidelines for newborn care. The student will have the opportunity to observe and perform under supervision common procedures done in the newborn nursery (ie. Spinal tap, Suprapubic tap, arterial blood gases, bladder catheterization, nasogastric intubation).

DURATION: 80 hours; two full time weeks

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 2 students per two week rotation

DATES OFFERED: Throughout the Year, except July and December

HOSPITALS: University District Hospital (UDH)

NIGHT DUTIES: No

EVALUATION: Performance, attitudes, quality of work ups and procedures

COURSE NAME: MPED 7019-8– Child Abuse and Youth Violence Prevention

COURSE COORDINATOR: Dr. Brenda Mirabal

COURSE DESCRIPTION: The student will participate in the activities of the Biopsychosocial Program for Battered Children of the Department of Pediatrics. He/she will learn to identify and manage child abuse through evaluation of patients referred for suspected child abuse, patient follow up, interdisciplinary case discussions and observation of court testimony. It is also expected that the student will participate in literature review of a topic related to child abuse. They will also participate in activities at a child advocacy center in Carolina, Community Outreach and Research Activities related to youth violence prevention.

DURATION: 80 hours; two full time weeks

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 1 students per two week rotation

DATES OFFERED: August – May, by personal arrangement

HOSPITALS: University Pediatric Hospital

NIGHT DUTIES: No

EVALUATION: Performance, attitudes, quality of work. At the end of the rotation the student is expected to prepare a written presentation on a related topic.

COURSE NAME: MPED 7020-2 – Pediatric Endocrinology

COURSE COORDINATOR: Dr. Lilliam González or Dr. Francisco Nieves

COURSE DESCRIPTION: The student will participate in activities pertinent to the diagnosis, evaluation and management of children having endocrinological, metabolic and genetic problems. The pediatric endocrinology section has various current clinical research projects involving the treatment growth failure, Insulin Dependent Diabetes Mellitus, sexual differentiation disorders etc. The student will also be able to have hands-on experiences with hospitalized and elective patients, emergency room and clinics. He/she will have the opportunity to interpret bone-age, X-rays, and endocrine laboratories.

DURATION: 160-320 hours; four to eight full time weeks.

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 1 students per two week rotation

DATES OFFERED: Throughout the Year, except December and January

HOSPITALS: University Pediatric Hospital

NIGHT DUTIES: No

EVALUATION: Oral and/or written exam. The course includes also literature research, topic discussions, Journal Club participation and a short project

COURSE NAME: MPED 7026-2 – Clinical Genetics

COURSE COORDINATOR: Dr. María del C. González

COURSE DESCRIPTION: The student will show acquisition of knowledge and skills in the detection, diagnosis and management of neonates with congenital anomalies. The course includes a review of basic concepts about mendelian patterns, especially those pertinent to pathology of chromosomes and transmission of diseases involving one or more genes, the detection and evaluation of hereditary and chromosome pathology related diseases. Genetic counseling and prevention is also included.

DURATION: 160 hours; four full time weeks.

PREREQUISITE: Medicine I and II.

ENROLLMENT: 3 students per two week rotation

DATES OFFERED: August to November and February to June

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: Written and oral exams, literature searches and preparation of reports on specific clinical genetic problems or cases.

COURSE NAME: MPED 7027-2 –Pediatric Nephrology

COURSE COORDINATOR: Dr. Juan Ovidio Perez

Alternate: Dr. Melvin Bonilla and Dr. Marta Suarez

COURSE DESCRIPTION: The student will have the opportunity to evaluate and manage ambulatory and hospitalized patients suffering from renal diseases electrolyte imbalances, in renal failure and receiving dialysis. They will get acquainted with those laboratory procedures necessary to evaluate these patients; family education and therapeutic interventions.

DURATION: 160 -240 hours; four to six full time weeks.

PREREQUISITE: have completed second year of medicine.

ENROLLMENT: 1-2 students per rotation

DATES OFFERED: Continuously throughout the year, except January, July and december

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: Student will be evaluated by his attitudes and knowledge demonstrated during the daily rounds in Ambulatory Clinics and case discussions

COURSE NAME: MPED 7028-2 - Clinical Pediatric Neurology

COURSE COORDINATOR: Dr. Marisel Vázquez, Dra. María Dávila

COURSE DESCRIPTION: The student will get acquainted with the most common clinical entitles in pediatric neurology. Emphasis will be made in the basic skills needed to perform a neurological evaluation and in the pathophysiologic mechanisms present in the clinical course of the disease.

DURATION: 80-160 hours; two to four full time weeks (160 hours recommended)

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 1-2 students per rotation

DATES OFFERED: Throughout the Year, except July and December

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: The student will be evaluated by means of formative examination (completed at home), oral presentations, and participation in rounds and clinic, according to the syllabus and course manual In addition to the above description the student will also participate in the multidisciplinary evaluation of patients:

1. Evaluation of hospitalized patients with neurological problems.
2. Participation in the Pediatric Neurology Clinic (4 hrs. per week) University Pediatric Hospital
3. Participation in Pediatric Epilepsy Clinics (4 hours per weeks) HOPU
4. Participation of Pediatric Neurology continuity clinic (4 hours per week) Medical Science Campus clinics

COURSE NAME: MPED 7030-2 – Pediatric Hematology

COURSE COORDINATOR: Dr. Enid Rivera

COURSE DESCRIPTION: The student will participate in evaluation of hospitalized and ambulatory patients with hematological conditions, and in regularly scheduled activities of this service. Also, the student will participate in Ambulatory Clinics, weekly Hematology Conference, Tumor Board Conference and Hemoglobinopathy and Coagulation Laboratory.

DURATION: 80 - 160 hours, two to four full weeks

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 1 students per two week rotation

DATES OFFERED: Throughout the Year

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: Evaluation Form

COURSE NAME: MPED 7036-2 – Pediatric Intensive Care

COURSE COORDINATOR: Dra. Alicia Fernández Seín

COURSE DESCRIPTION: The student will have the opportunity to work on critically ill patients and will learn about the normal and pathological physiology of several diseases.

He/she will also have to manage patients in respiratory and cardiovascular insufficiency, coma, the use of fluids/electrolytes, and artificial mechanical ventilation. Also he/she get involved in difficult ethical decision.

DURATION: 80-160 hours; two to four full time weeks

PREREQUISITE: have completed third year Pediatric Clerkship

ENROLLMENT: 1 student per two week rotation

DATES OFFERED: All year except December, January and July

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: Yes

EVALUATION: Oral presentation of an assigned topic. Optional on-line pediatric critical care examination. The student must attend all academic activities. The academic activities are all didactic activities, daily ward rounds with attending and night shifts with senior resident and or critical care fellow and/or fellow, and weekly journal club.

COURSE NAME: MPED 7045-2 – Pediatric Oncology

COURSE COORDINATOR: Dr. Gloria Colón

COURSE DESCRIPTION: The student will participate in evaluation of hospitalized and ambulatory patients with hematological conditions, and in regularly scheduled activities of this service. Also, the student will participate in Ambulatory Clinics, weekly Hematology Conference, Tumor Board Conference and Hemoglobinopathy and Coagulation Laboratory.

DURATION: 80 - 160 hours, two to four full weeks

PREREQUISITE: Internal Medicine and Pediatrics third year course

ENROLLMENT: 2 students per two week rotation

DATES OFFERED: All academic year except December

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: Theme Case Presentation

COURSE NAME: MPED 7105-2 – Research in Pediatrics

COURSE COORDINATOR: Dr. Clemente Díaz

COURSE DESCRIPTION: This is a laboratory course with field experiences directed to medical students. Students are expected to learn the basic elements of the research process in Pediatrics through the close interaction with a research preceptor/mentor and their participation in some of the departmental research projects.

DURATION: 160-320 hours

PREREQUISITE: Medicine I

ENROLLMENT: by arrangements

DATES OFFERED: All academic year

HOSPITALS: University Pediatric Hospital (UPH)

NIGHT DUTIES: No

EVALUATION: The student will be evaluated by the proctor in charge of the project using the following scale:

Daily Work	60%
Oral Presentation	15%
Written Presentation	15%
Anecdotic Daily Log	10%

COURSE NAME: MPED 7106-2 – Research on History of Health

COURSE COORDINATOR: José G. Rigau Pérez, M.D.

COURSE DESCRIPTION: This course aims to provide students with an investigation in historical events, and professional conceptions related to health problems using resources from the Medical Sciences Campus and the Río Piedras Campus of the University of Puerto Rico. Students will conduct an original investigation using primary and secondary resources.

DURATION: 160 - 320 hours

PREREQUISITE: Medicine I

ENROLLMENT: 2 students max

DATES OFFERED: By arrangement

HOSPITALS: University Pediatric Hospital (UPH) (to start, then by arrangement)

NIGHT DUTIES: No

EVALUATION:

Discussion- 25%

Oral Presentation - 25%

Written Report - 50%