



**UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE
CURRICULUM OFFICE**



**FOURTH YEAR MANUAL
AND
ELECTIVE COURSES CATALOG**

2015-2016



**UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE
CURRICULUM OFFICE**



**FOURTH YEAR MANUAL
AND
ELECTIVE COURSES CATALOG**

2015 - 2016

TABLE OF CONTENTS

PAGE

Introduction	5
---------------------------	----------

FOURTH YEAR REQUIREMENTS

I. Required Clerkship	7
II. Selective Clerkship	7
III. Other Requirements	7
-Clinical Performance Examination (CPX)	8
-USMLE Part I and II	9
IV. Elective Courses	9
V. Summary of Minimum Graduation Requirements	9

ADMINISTRATIVE PROCEDURES

Scheduling of Courses	10
Pre-registration	10
Courses involving Remuneration	10
Required and/or Selective Clerkships at other Accredited Institutions	11
Add/Drop Courses	11

ELECTIVE COURSE PROGRAM (BASIC OR CLINICAL)

Objectives of the Elective Courses Programs	11
Guidelines for Students Applying for Elective Courses in	
Other Accredited Schools	11
New Elective Courses	12
Guidelines for Students Applying for Elec. Courses Foreign Schools	13

EVALUATION PROCESS

Student Evaluation.	13
Required Level of Performance	13
Due Process	13

GENERAL GUIDELINES FOR VISITING STUDENTS IN ELECTIVE COURSES

Eligibility	15 - 17
Office Contacts	17

Website Address	17
Website for Registrars Office and Services	17
VISITING STUDENT APPLICATION FORM	19
Visiting Student Health Record Form	20
ELECTIVE COURSES CATALOG BY DEPARTMENTS	21 - 22
Anesthesiology.....	28 - 31
Dermatology	32 - 34
Emergency Medicine	35 - 38
Internal Medicine	39 - 62
Family Medicine	63 - 68
Obstetrics and Gynecology	69 - 74
Ophthalmology	75 - 78
Pathology	79 - 83
Pediatrics	84 -103
Physical Medicine and Rehabilitation	104 –107
Physiology	108 - 109
Psychiatry	110 - 118
Public Health	119 - 120
Radiology	121 - 123
Surgery	124 - 134
Research	135 -141
Interdisciplinary Courses	142 -145

INTRODUCTION

The famous author of “El Principito”, Antoine de Saint-Exupery, once wrote: “If we want a world of justice and peace we need to most resolutely put the intelligence to the service of love”. This famous phrase probably encompasses part of the mission that we have set out to fulfill as physicians in our lives. Today you are closer to reaching that goal you set out several years ago – becoming a physician. During your fourth year of medical school you will have the opportunity to choose elective courses that will complete the curriculum offer of your studies. Your fourth year of study represents the end of enriching experiences as students and the beginning of an ever-going learning process for the benefit of your patients and yourselves.

Your learning experiences will continue throughout your medical career and taking that into account, the School of Medicine and the Curriculum Office have developed the Counseling Program that will allow you to select a faculty member that will guide you through the process of choosing your elective courses and orient yourself in the academic offer of select courses that you will have to take in your fourth year. You will have the chance to choose the faculty member that you wish to help you throughout this process. This physician will refer you, upon request, to other professionals within the basic sciences, medical specialties, or administrative programs for further orientation on your fourth year program. The faculty member you choose will revise and endorse it prior to pre-registration. Allow this experience to be stimulating for you and the faculty member since you will have the opportunity to select courses that fulfill your needs and particular interests within what you have chosen to be your future specialty. The clinical department faculty and the Curriculum Office have carefully revised the courses in which you will have the opportunity to choose based on your particular interest depending on the residency program that you will apply for. Allow this process to aid you in achieving a well rounded experience prior to your residency training.

This manual includes all of the approved options for your last year of medical school and the elective courses offered by each department. Every year new courses and electives are approved and offered to our students. These courses principally respond to our recommendations and the recommendations of the faculty that have been guiding you throughout this learning experience.

Your years in medical school may have reached the end but certainly not your studies and learning process. These years have represented effort and dedication on your part and the support of your professors, family, classmates and friends. As a student in your final year you will require the assistance of our Associate Dean of Student Affairs and the Curriculum Office's Director and their secretarial staff that are always willing to aid and guide you as they help you through this process. Use the resources that you have available and allow for this to be an enriching experience for all.

I wish you success in the rest of your career.

A handwritten signature in black ink, appearing to read 'Belinda Beauchamp', with a stylized flourish at the end.

Belinda Beauchamp, MD
President
Fourth Year Committee
Graduation and Awards Committee
Email: belinda.beauchamp@upr.edu

UNIVERSITY OF PUERTO RICO
SCHOOL OF MEDICINE
2015 - 2016

FOURTH YEAR REQUIREMENTS

The Minimum Fourth Year/Level Graduation Requirements are: 1376 hours (8.5 months approximately) which must include:

I One Required Clerkship (160 hrs.)

MCUA 7429 Clerkship in Medicine

II One Selective Clerkship (160 hrs.)

It must be selected from the following courses:

Any of the Required Clerkships (Not Repeated)

MCIR 7010	General Surgery
MCIR 7004	Trauma Surgery
MPSI 7010	Psychiatric Junior Internship
MMED 7057	Emergency Medicine
MOBG 7010	Applied Obstetrics and Gynecology
MPED 7010	General Pediatrics
MMFA 7010	Clerkship in Family Medicine

****At the end of each rotation the students must complete the resident faculty evaluation in order to receive the final grade***

III Other Requirements:

These courses will be offered during the following dates:

***MCUA 7438 - Dermatology (one week) 40 hrs.
(No more than 25 students in each rotation)***

- ***Section 1: August 10 to 14, 2015***
- ***Section 2: October 19 to 23, 2015***
- ***Section 3: November 16 to 20, 2015***
- ***Section 4: January 25 to 29, 2016***
- ***Section 5: February 22 to 26, 2016***
- ***Section 6: April 18 to 22, 2016***

***MCUA 7437 - Physical Medicine, Rehabilitation and Sports Medicine (one week) 40 hrs.
(No more than 15 students in each rotation)***

- ***Section 1: August 3 to 7, 2015***
- ***Section 2: August 10 to 14, 2015***
- ***Section 3: October 12 to 16, 2015***
- ***Section 4: October 19 to 23, 2015***
- ***Section 5: November 16 to 20, 2015***

- **Section 6: February 1 to 5, 2016**
- **Section 7: February 8 to 12, 2016**
- **Section 8: March 14 to 18, 2016**
- **Section 9: March 28 to April 1, 2016**
- **Section 10: April 25 to 29, 2016**

MCUA 7427 - Public Health (3 weeks) 120 hrs. (No more than 25 students in each rotation)

- **Section 01: October 26 to November 13, 2015**
- **Section 02: November 23 to December 11, 2015**
- **Section 03: January 11 to 29, 2016**
- **Section 04: February 8 to 26, 2016**
- **Section 05: April 4 to 22, 2016**

MCUA 7439 – Population Health (1 week) 40 hrs. (No more than 60 students in each rotation)

- **Section 01: February 29 to March 4, 2016**
- **Section 02: April 25 to 29, 2016**

MCUA 7418 – Neurology (2 weeks) 80 hrs. (No more than 20 students in each rotation)

- **Section 01: August 17 to 28, 2015**
- **Section 02: September 28 to October 9, 2015**
- **Section 03: December 7 to 18, 2015**
- **Section 04: March 7 to 18, 2016**
- **Section 05: April 4 to 15, 2016**
- **Section 06: May 2 to 13, 2016**

MCUA 7440 – Family Medicine (4 weeks) 160 hrs. (No more than 25 students in each rotation)

- **Section 01: August 3 to 28, 2015**
- **Section 02: September 28 to October 23, 2015**
- **Section 03: January 11 to February 5, 2016**
- **Section 04: February 8 to March 4, 2016**
- **Section 05: April 4 to 29, 2016**

MCUA 7445 – Ethics III Online modules (16 hours)

At the end of each rotation the students must complete the resident faculty evaluation in order to receive the final grade.

Clinical Performance Examination (CPX II)

All students must approved the CPX (see CPX Manual) in order to be considered a graduation Candidate). Students will have all information on the CPX, including exam dates, available through their Blackboard account. All students are responsible of accessing this information.

Approval of USMLE-Part I and II CK (United States Medical Licensure Examination)

Students must approve Step 1 and Step 2 CK of the USMLE prior to graduation. The student will be a candidate for graduation as long as he/she does not exceed the six year limit to complete all the requirements.

IV Elective Courses

A total of 14 weeks are available for electives in clinical and/or basic science courses. (3.5 months), (560 hours)

V Summary of Minimum Graduation Requirements for 2015 - 2016:

<u>Course</u>	<u>Weeks</u>	<u>Hours</u>
☛Required Clerkship	4	160
☛Selective Clerkship	4	160
☛Public Health	3	120
☛Population Health	1	40
☛Dermatology	1	40
☛Ethics (during academic year)	-	16
☛Physical Medicine Rehabilitation and Sports Medicine	1	40
☛Neurology	2	80
☛Family Medicine	4	160
☛Electives	14	<u>560</u>
		1376

Elective courses taken prior to the clinical years will be accredited to the electives component.

A student who has satisfactorily completed all required courses, who also approves the USMLE Step 1 and Step 2 CK examination, the CPX and all the courses in which she/he registers during the fourth year, will be recommended for graduation. These requisites were approved by the Academic Senate revised on December 18, 2007 "Policies and Guidelines for the Academic Evaluation and Advancement of Medical Students" approved by the faculty of Medicine on May, 2014.

ADMINISTRATIVE PROCEDURES:

Scheduling of Courses:

***Confirmation of courses will be based on the priority number assigned to each student.** This procedure is done by a group of class representatives with the assistance of the Informatics Center by a computer sorting of the student ID.*

Pre-Registration:

*During **May 4-8, 2015**, MS IV students must submit the Pre-Registration form with the selection of all the courses required to complete graduation requirements. Also this form **must have** the endorsement of the Academic Counselor selected.*

Student should check that:

- 1. The Pre-Registration form is filled out IN PENCIL.*
- 2. The course number and title are correct **and student complies with the pre-requisites of the course.***
- 3. The dates requested are in block form, that is, the course must start on a Monday and end on a Friday of each week - 40 hours per week.*
- 4. The total number of weeks and hours of a given course are correct.*
- 5. The total number of required hours are completed before May 27, 2015.*
- 6. Elective courses taken previously are properly accredited and reported to the Registrar's Office.*

Courses involving Remuneration

There is no credit allowed for elective courses in which remuneration has been received. Stipend for student's housing and meal expenses is not considered remuneration or salary.

Required and/or Selective Clerkships at other Accredited Institutions:

*Some of the courses listed on the **Required** and Selective Clerkships may be taken at any LCME accredited institution with the approval of the Head of the Department concerned at the University of Puerto Rico, School of Medicine.*

Add/Drop Courses

Any changes (add/drop) of courses will be processed at the Curriculum Office (A-868).

*Changes to the student program should be made at least **two weeks** prior to the beginning of the course.*

ELECTIVE COURSES PROGRAM: (BASIC OR CLINICAL)

Objectives of the Elective Courses Program

1. *Improve or strengthen areas of possible deficiencies.*
2. *Widen knowledge and skills in areas of particular personal interest.*
3. *Pursue the study of special topics or areas of investigation.*
4. *Expose the future professional to various disciplines, regions, or Health Care Centers that may influence his/her future orientation in the practice of medicine in the light of possible needs of the Institution or Puerto Rico.*

*Elective courses during the first three years are available to students who have satisfactorily completed the required courses and comply with the pre-requisites of the courses. **The sponsors of these Elective Courses should not accept any student until the Curriculum Director has assured them that the student is in good academic standing.***

Students enrolled in a Research Elective during the summer will not be allowed to take concurrently a full time (8 hrs/day) clinical course. A maximum of 160 hours will be credited to any research experience

Students enrolled in long-term Research Elective (a duration greater than two months up to one year) will be credited a maximum of 240 hrs. and will be allowed to continue with the regular program concurrently.

***With the guidance of the selected faculty advisor,** the third year medical student will select and prepare the Fourth Year Program. Guidance will be provided so that the student can fulfill the general requirements of the program and at the same time his/her own needs.*

Guidelines for Students Applying for Elective Courses in Other Accredited Schools

- a. *The fourth year student must be in good academic standing. He/She is allowed to take elective courses outside the UPR School of Medicine, with the appropriate approval.*
- b. ***Students in academic probation are not eligible for electives abroad.***
- c. *He/She should seek orientation with the Academic Counselor or an appropriate faculty member regarding the elective course(s) he/she is planning abroad.*
- d. *A description of the elective course from the institution of his/her selection is required. He/she will present the course description and evidence of acceptance to the Head of the Department concerned for final approval.*

- e. *The Head of the Department concerned will evaluate and consider the student Application for Elective Courses by completing and signing this form. The signed application should be submitted to the Curriculum Office in order to continue the process.*
- f. *Approval by the Department Chairman of the host school is required. This approval must include assurance that the departmental chairman of the host school will submit a grade and written evaluation of the student's performance using our evaluation form.*
- g. *Evaluation forms must be sent directly to the Evaluation Office or to the Head of the Department. Students are not allowed to hand in evaluation forms.*
- h. *After receiving acceptance from the Head of the Department, and confirmation from the host School of Medicine, the student must:*
It is the student's responsibility to comply with this procedure at least two months prior to the Elective. Otherwise, the visiting school will be informed that the University of Puerto Rico School of Medicine is not responsible for this coverage.
- i. *Electives in a specialized area is limited to three months: (to comply with minimum required courses) (Ex. Ophthalmology, Orthopedics, Urology, etc.)*
- j. *For any extramural course, the student must submit to the Evaluation Office of the School of Medicine the name and address of the faculty preceptor of the host institution in order to send the evaluation form to be completed in the parent institution.*
All expenses involved in extramural electives is the student's responsibility.

New Elective Courses

Any preceptor interested in offering new courses must complete an application for new courses, have the written approval of the Head of the Department and submit them through their representative to the Fourth Year Committee. The Committee will study, revise and approve the course. New elective courses are officially registered at the Medical Sciences Campus Registrar's Office accordance with established regulations. The new courses approved will be posted at the Bulletin Board in the Curriculum Office. Criteria to be fulfilled by these courses are specified in the Administrative Guidelines available at the Curriculum Office.

Guidelines for Students Applying for Elective Courses in Foreign Schools

1. *The fourth year student must be in good academic standing. He/She is allowed to take elective courses outside the UPR School of Medicine, with the appropriate approval.*
2. *Student must submit evidence of acceptance and a detailed description of the elective course.*
3. *Student must submit name, address, telephone, etc. of the proctor assigned.*
4. *Evaluation form from our Institution is required to be completed by the proctor assigned.*
5. *Student is responsible for any governmental requirements for traveling abroad.*

EVALUATION PROCESS

Student Evaluation

There is an official evaluation form available at the Evaluation Office (877). Students are evaluated in one of the following categories:

A, B, C, or Failed (F).

The course preceptor must correctly fill out all data requested and forward it to the Head of the Department for final approval. Original of the student evaluation and the Official Course List of the Registrar's Office form must be sent to the Evaluation Office of the School of Medicine.

Required Level of Performance

A deficient or incomplete evaluation of student performance will be considered unsatisfactory by the Graduation Committee. Remedial work must be accomplished before credit is granted.

Due Process

Students due process will be conducted according to the "Policies and Procedures of the Graduation and Awards Committee" which has the legal basis in the document, Task Force on Evaluation, June, 2008.

NOTE: The revisions of this catalog do not constitute an irrevocable contract between the student and the UPR School of Medicine. The School of Medicine reserves the right to effect policy and regulatory changes at any time.

Revised January 2015

***GENERAL GUIDELINES FOR
VISITING STUDENTS IN
ELECTIVE COURSES***



UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE



**GUIDELINES FOR VISITING STUDENTS IN ELECTIVE COURSES
2015 - 2016**

Students in good academic standing from Liaison Committee on Medical Education (LCME) accredited medical schools may be considered for any elective listed at the University of Puerto Rico School of Medicine manual subject to space availability. Students from non-accredited Schools of Medicine by the LCME may be considered if complying with the same requisites and subject to space, for up to two months.

ELEGIBILITY:

To be eligible the student must:

1. *Have completed the pre-requisites of the course selected.*

For fourth year courses, have the following third year course requirements:

Internal Medicine	10 weeks
Pediatrics	9 weeks
OB/Gyn	6 weeks
Surgery	9 weeks
Radiology	online weeks
Psychiatry	6 weeks

"See elective for specific requirements"

2. **Complete the Visiting Student Application Form and the Visiting Student Health Record Form in all parts. The application must be submitted to the Curriculum Office within two months prior to the rotation starting date.**

Application should be sent to:

Prof. Delia M. Herrera
University of Puerto Rico, Medical Sciences Campus
School of Medicine, Curriculum Office, 8th floor, #A-868
PO Box 365067
San Juan, PR 00936-5067

3. *Have a written authorization from the Dean of Clinical Affairs or authorized delegate of the parent School of Medicine expressing the approval of the student's request.*
4. *Be covered by the parent institution with the professional liability insurance. If not available, the applicant must show evidence of personal professional liability insurance coverage.*
5. *Show evidence of a Health Insurance coverage.*

6. Submit a transcript of the medical courses approved with a **minimum of 2.50 point average** or its equivalent (Class Ranking). If the school has an honor system our translation will be as follow:

-Outstanding = 4
-Satisfactory = 3
-Unsatisfactory = 0

OR

-Outstanding = 4
-Above Average = 3.5
-Average = 3
-Below Average = 2.5
-Unsatisfactory = 0

7. **The student must be fully bilingual: Spanish and English.** If the elective requested entails direct contact with patients, students must be able to **speak a fluent conversational Spanish**, as our main population is Spanish speaking. Medical records at the hospital are written in English.
8. Student must be in his/her final academic year/level.
9. The student will be notified regarding the status of the application after completion of the local senior students' enrollment period on July of each calendar year.
10. Student should first report to the UPR School of Medicine, Curriculum Office A-868 (8th floor of the Medical Sciences Campus Building), in order to start the registration process.
11. Visiting students can register courses which do not overpass the maximum of eight weeks duration permitted in one academic year (september to may), you may choose from one of the followings:
- a. one four weeks duration course
 - b. one eight weeks duration course
 - c. two four weeks duration courses
 - d. one research elective course
 - e. one research and one elective course
12. Register as special student and pay the minimum enrollment fee **(\$600.00 per course)**. **(This fee is non-refundable if student drops a course. It must be paid before the course starting date. No student can take a course without paying the enrollment fee.)**
- a. one four weeks duration course - \$600.00
 - b. one eight weeks duration course - \$1,200.00
 - c. two four weeks duration courses - \$1,200.00
 - d. one research elective course - \$600.00
 - e. one research and one elective course - \$1,200.00
13. **Total withdrawals must be done within one month in advance.** Changes in programmed courses must be applied within two weeks before the course begins.
14. Copy of the official government state VISA for the period of the elective(s). (For Non-USA Citizens)
15. Student must report to the Medical Faculty Office in the hospital assigned, for hospital identification.

16. Student must wear the student Identification Card from his/her School at all times during the elective.
17. Student will receive academic credit from their own medical school for the elective course taken at the UPR School of Medicine. Evaluation form will be sent to the parent institution when received at the Curriculum Office, University of Puerto Rico School of Medicine.
18. Foreign (**not USA citizens**) students must follow the following procedures:
 - a) Get in touch with the RCM **DSO (Designated School Official)** for foreign students program: **Mr. Reinaldo Pomaes, 1-787-758-2525 Ext. 5244 or reinaldo.pomaes@upr.edu**
 - b) Complete the Form I-20 (Eligibility Certificate) that the DSO will send to you so you can apply for the F-1 Visa classification at the US Consulate in your country. US State Department's F-1 is the student classification visa for non-in-migrant. **Students with B1/B2 visa cannot matriculate until they have changed their visa classification to F-1.**
 - c) F-1 visa classified students cannot be admitted 30 days before classes begin or before the beginning date written in the I-20 Form. Students must matriculate no later than the last day for courses changes.
 - d) Required documents for the F-1 Visa:
 - Admission certificate
 - Economic solvency evidence in **original documents**: Affidavit from parents or guardian

(*The University of Puerto Rico reserves the right to accept any exchange student in accordance to local rules and regulations)

OFFICE CONTACTS:

For any additional information, student should contact:

Delia Herrera, LSW,MSW
Curriculum Office
School of Medicine
Telephone : (787) 758-2525, Ext. 2219
Fax Number: (787) 758-4029
Mail to: delia.herrera@upr.edu

María E. Padilla, MD
Curriculum Office
School of Medicine
Telephone: (787) 758-2525, Ext. 2220
Fax: (787) 758-4029
Mail to: maria.padilla4@upr.edu

WEBSITE ADDRESS:

Website for Manual and Application Form:

<http://www.md.rcm.upr.edu/curriculum>

WEBSITE FOR REGISTRARS OFFICE AND SERVICES:

<http://www.rcm.upr.edu>

**VISITING STUDENT APPLICATION
FORM**



UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE



VISITING STUDENT APPLICATION FORM

DATE: _____

I PERSONAL INFORMATION

NAME OF APPLICANT : _____

ADDRESS : _____

TELEPHONE : _____ SOCIAL SECURITY#: _____

E-MAIL ADDRESS : _____

MALE: _____ FEMALE: _____ UPR STUDENT NUMBER: _____

II ELECTIVE (S) COURSE (S) REQUESTED

(1) COURSE # AND TITLE : _____

DATES : _____

HOSPITAL : _____

(2) COURSE # AND TITLE : _____

DATES : _____

HOSPITAL : _____

Student Signature

III APPROVAL: FROM DEAN OF STUDENT OR COMPARABLE OFFICIAL WHERE STUDENT IS ENROLLED.

I hereby certify the medical student named above

- A. has being authorize to take the above elective(s)
- B. is in his/her final year
- C. Is in good academic standing at this institution
- D. has a Liability Insurance coverage while taking this course at your institution
- E. is covered by a Student Health Insurance while taking this course at your institution
- F. (Will/Will not) need an Evaluation Report at the conclusion of the course or clerkship

Authorizing Officer Name : _____ Date : _____

Signature : _____ School : _____

Title : _____ Address: _____

E-Mail Address : _____

DATE RECEIVED AT CURRICULUM OFFICE: _____



Visiting Student Health Record Form

Name _____ Birth Date ____/____/____
Last First

Address _____
Street

City _____ Zip Code _____ Medical Insurance Valid in PR _____

Program _____ Social Security # ____-____-____ Phone _____

Persons to be contact in case of emergency _____

Phone _____ Cell Phone _____

Health condition (s) that may require attention during your stay ____/____/____

VACCINES	DATE: MONTH / DAY / YEAR
Tetanus-Diphtheria Booster Receive within past 10 years	____/____/____
Measles/Mumps/Rubella (MMR) Two doses required or if given separately: Measles (2 doses) Live virus only or Positive Antibody Titer Mumps or Positive Antibody Titer Rubella or Positive Antibody Titer Or Vaccination within the past three years	Dose 1 ____/____/____ Dose 2 ____/____/____ (MMR) Dose 1 ____/____/____ Dose 2 ____/____/____ (Measles) or + Titer ____/____/____ Result: _____ Dose 1 ____/____/____ or + Titer ____/____/____ Result: _____ Dose 1 ____/____/____ or + Titer ____/____/____ Result: _____
Hepatitis B or Positive Antibody Titer (anti-HBS)	Dose 1 ____/____/____ Dose 2 ____/____/____ Dose 3 ____/____/____ or + Titer ____/____/____ Result: _____
Tuberculin Test (Mantoux) Within the past 12 months Date _____ Chest X-Ray Required if TB Positive within the past year Had BCG Vaccine: ____ Yes ____ No INH Treatment : ____ Yes ____ No	Circle Result: Negative Positive Date ____/____/____ X Ray Result: Negative Positive Date ____/____/____ Length of Treatment: From: ____/____/____ to ____/____/____
Varicella (Chicken pox) Vaccine: Date: ____/____/____	Had Disease: ____ Yes ____ No ____ Unknow Dose 1 ____/____/____ Dose 2 ____/____/____
Polio Date of last booster	Last Dose ____/____/____

Drug Allergies? _____

Do you need reasonable accommodation? _____

Required:

Physician's or Nurse Name Print _____ Physician's or Nurse Signature _____

Physician's Address _____

Lic. No. _____ Phone Number _____ Date _____

*Please, fill all blanks with your doctor and return this document to Student Medical Services, PO Box 365067 San Juan PR 00936-5067 or deliver personally to Student Medical Services, 3rd floor, Main Building of the Medical Sciences Campus. Tel (787) 758-2525 Exts. 1215 & 1216 Fax: (787) 766-0122

ELECTIVE COURSES CATALOG
BY DEPARTMENT

ELECTIVE COURSES CATALOG

(DECODING OF COURSE NUMBER AND HOSPITALS) **(Ex. MMED 7010_1)**

MMED	—	The first four letters identifies the Department (MMED _ Medicine)
7010	—	The first four numbers identifies the course
1	—	The last number after a hyphen identifies the Hospital (UDH)

DECODING OF HOSPITALS

-1	UDH	University District Hospital
-2	UPH	University Pediatric Hospital
-3	SJCH	San Juan City Hospital
-4	VAH	Veterans Administration Hospital
-6	PCE	Ponce Regional Hospital
-7	MMC	Mayaguez Medical Center
-8	MSC	Medical Sciences Campus
-9	MC	Medical Center OPD Clinics
-10	MC	Medical Center
-11	PSH	Psychiatric State Hospital
-12	IND	Industrial Hospital
-13	CAR	Carolina Regional Hospital
-14	SAP	San Pablo Hospital, Bayamón
-17	CAY	Cayey Area Hospital
-18	AUX	Auxilio Mutuo Hospital
-19	CVC	Cardiovascular Center
-20	PAH	Pan American Hospital, Cidra
-21	PH	Pavia Hospital
-22	SJC	San Juan Capestrano
-23	SMC	Santurce Medical Center
-24	MAN	Manati Area Hospital
-25	MAZ	Bella Vista, Mayaguez
-26	RIN	Hospital de Rincón

ELECTIVE COURSES CATALOG

2015-2016

COURSE NUMBER	COURSE TITLE	HOSPITAL	PAGES
DEPARTMENT OF ANESTHESIOLOGY			
MANE 7010-1	INT. ANESTHESIOLOGY AND RESUSCITATION	UDH	29
MANE 7015-1	INT. TO POST ANESTHESIA CARE UNIT	UDH	30
MANE 7105-1	RESEARCH IN ANESTHESIOLOGY	UDH	31
DEPARTMENT OF DERMATOLOGY			
MDER 7010-1	DERMATOLOGY IN EVERYDAY PRACTICE	UDH	33
MDER 7010-13	DERMATOLOGY IN EVERYDAY PRACTICE	CAR	34
MDER 7015-1	INVESTIGATION IN DERMATOLOGY	UDH	34
DEPARTMENT OF EMERGENCY MEDICINE			
MEMR 7010-13	PRINCIPLES OF EMERGENCY MEDICINE	CAR	36
MMED 7057-13	EMERGENCY MEDICINE	CAR	37
MCIR 7055-13	QUALITY ASSURANCE AND TOTAL QUALITY MANAGEMENT IN THE EMERGENCY DEPARTMENT	CAR	38
DEPARTMENT OF INTERNAL MEDICINE			
MMED 7010-1	CLINICAL CLERKSHIP IN MEDICINE	UDH	40
MMED 7010-3	CLINICAL CLERKSHIP IN MEDICINE	SJCH	40
MMED 7010-4	CLINICAL CLERKSHIP IN MEDICINE	VAH	41
MMED 7010-7	CLINICAL CLERKSHIP IN MEDICINE	MMC	42
MMED 7010-13	CLINICAL CLERKSHIP IN MEDICINE	CAR	42
MMED 7015-19	DIAGNOSIS/MANAGEMENT CARDIOV. DISEASES	CVC	43
MMED 7016-7	CARDIOLOGY AND ELECTROCARDIOGRAPHY	MMC	43
MMED 7018-3	CARDIOVASCULAR DISEASES	SJCH	44
MMED 7020-4	CORONARY CARE UNIT	VAH	45
MMED 7020-19	CORONARY CARE UNIT	CVC	45
MMED 7026-1	CLINICAL CLERKSHIP ENDOCRINOLOGY DIABETES	UDH	46
MMED 7026-3	CLINICAL CLERKSHIP ENDOCRINOLOGY DIABETES	SJCH	47
MMED 7027-1	DIAGNOSIS/MANAGEMENT GASTROINT. DISEASES	UDH	47
MMED 7028-4	CLINICAL GASTROENTEROLOGY	VAH	48
MMED 7029-1	CLINICAL AND LAB. ASPECTS ON HEMA/ONCO	UDH	49
MMED 7030-3	HEMATOLOGY	SJCH	49
MMED 7030-4	HEMATOLOGY	VAH	50
MMED 7035-1	INFECTIOUS DISEASES AND PARASITOLOGY	UDH	51
MMED 7035-4	INFECTIOUS DISEASES AND PARASITOLOGY	VAH	52

MMED 7036-1	NEPHROLOGY	UDH	52
MMED 7037-1	NEUROLOGY	UDH	53
MMED 7037-3	NEUROLOGY	SJCH	53
MMED 7037-4	NEUROLOGY	VAH	54
MMED 7039-1	DIAGNOSIS/MANAGEMENT PULMONARY DISEASES	UDH	55
MMED 7039-4	DIAGNOSIS/MANAGEMENT PULMONARY DISEASES	VAH	56
MMED 7040-7	CLINICAL PNEUMOLOGY	MAY	56
MMED 7045-1	BASIC AND CLINICAL RHEUMATOLOGY	UDH	57
MMED 7046-4	GENERAL INTENSIVE CARE	VAH	58
MMED 7046-18	GENERAL INTENSIVE CARE	AUX	59
MMED 7047-9	OUTPATIENT DEPARTMENT CLINICAL EXPERIENCE	MSC	59
MMED 7048-4	RENAL METABOLIC COURSE	VAH	60
MMED 7060-13	GERIATRIC MEDICINE CLERKSHIP	CAR	60
MMED 7080-8	RESEARCH IN GASTROENTEROLOGY	MSC	61
MMED 7085-4	TUBERCULOSIS CLINICAL EDUCATION	VAH	61
MMED 7086-8	INTRODUCTION TO ORGAN AND TISSUE DONATION	MSC	62
DEPARTMENT OF FAMILY MEDICINE			
MMFA 7010-13	CLINICAL CLERKSHIP IN FAMILY MEDICINE	CAR	64
MMFA 7010-24	CLINICAL CLERKSHIP IN FAMILY MEDICINE	MANATI	65
MMFA 7010-25	CLINICAL CLERKSHIP IN FAMILY MEDICINE	BELLA VISTA	65
MMFA 7016	FAMILY PRACTICE IN THE COMMUNITY Aibonito, Castañer, Barceloneta, Loíza, Migrantes Mayagüez, Rincón	VARIES	66-67
MMFA 7019-8	FAMILY PRACTICE PRECEPTORSHIP	VARIES	68
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY			
MOBG 7010-1	APPLIED OBSTETRICS/GYNECOLOGY	UDH	70
MOBG 7010-3	APPLIED OBSTETRICS/GYNECOLOGY	SJCH	70
MOBG 7010-13	APPLIED OBSTETRICS/GYNECOLOGY	CAR	70
MOBG 7015-1	APPLIED GENERAL GYNECOLOGY	UDH	71
MOBG 7015-3	APPLIED GENERAL GYNECOLOGY	SJCH	71
MOBG 7015-9	OUTPATIENT CLINIC GYNECOLOGY	MSC	72
MOBG 7016-1	APPLIED GYNECOLOGY ONCOLOGY	UDH	72
MOBG 7017-3	APPLIED OBSTETRICS	SJCH	73
MOBG 7018-1	FETAL MATERNAL MEDICINE	UDH	73
MOBG 7027-8	RESEARCHING IN OBSTETRICS AND GYNECOLOGY	MSC	74
MOBG 7028-8	WOMEN HEALTH	MSC	74
DEPARTMENT OF OPHTHALMOLOGY			

MOFT 7010-1	CLINICAL OPHTHALMOLOGY	UDH	76
MOFT 7010-4	CLINICAL OPHTHALMOLOGY	VAH	76
MOFT 7010-13	CLINICAL OPHTHALMOLOGY	CAR	76
MOFT 7015-8	RESEARCH IN OPHTHALMOLOGY	MSC	77
MOFT 7995-8	INTRODUCTION TO MEDICAL ETHICS	MSC	78
DEPARTMENT OF PATHOLOGY			
MPAT 7010-8	BASIC ANATOMIC PATHOLOGY	MSC	80
MPAT 7017-8	TRANSFUSION MEDICINE	MSC	80
MPAT 7019-8	LABORATORY MEDICINE	MSC	81
MPAT 7025-8	THE ASCENT OF MAN	MCS	81
MPAT 7995-8	INST./EVALUATION STRATEGIES PATHOLOGY	MCS	82
MPAT 7996-8	PEDIATRIC PATHOLOGY	MSC	82
MPAT 7997-8	MEDICINE IN SHAKESPEARE	MSC	83
MPAT 7105-8	DARWINIAN MEDICINE	MSC	83
DEPARTMENT OF PEDIATRICS			
MPED 7010-2	GENERAL PEDIATRICS	UPH	85
MPED 7010-3	GENERAL PEDIATRICS	SJCH	86
MPED 7010-13	GENERAL PEDIATRICS	CAR	87
MPED 7015-2	INTRODUCTION TO CARE OF HIGH RISK INFANT	UPH	88
MPED 7018-2	INTRODUCTION TO PEDIATRIC CARDIOLOGY	UPH	89
MPED 7019-2	PRIMARY PEDIATRIC HEALTH CARE	UPH	90-94
MPED 7020-2	PEDIATRIC ENDOCRINOLOGY	UPH	95
MPED 7026-2	CLINICAL GENETICS	UPH	96
MPED 7027-2	PEDIATRIC NEPHROLOGY	UPH	97
MPED 7028-2	CLINICAL PEDIATRIC NEUROLOGY	UPH	98
MPED 7030-2	PEDIATRIC HEMATOLOGY	UPH	99
MPED 7030-3	PEDIATRIC HEMATOLOGY	SJCH	99
MPED 7036-2	PEDIATRIC INTENSIVE CARE	UPH	100
MPED 7045-2	PEDIATRIC ONCOLOGY	UPH	101
MPED 7046-3	DEVELOPMENTAL PEDIATRICS	SJCH	101
MPED 7105-2	RESEARCH IN PEDIATRICS	UPH	102
MPED 7106-2	RESEARCH - HISTORY OF HEALTH	CDC DENGUE	103
DEPT. OF PHYSICAL MED., REHABILITATION AND SPORTS MED.			
MCIR 7027-1	INTRODUCTION TO CLINICAL PHYSIATRY	UDH	105
MCIR 7027-4	INTRODUCTION TO CLINICAL PHYSIATRY	VAH	105
MCIR 7027-13	INTRODUCTION TO CLINICAL PHYSIATRY	CAR	106

MCIR 7036-8	TOPICS SPORTS HEALTH AND EXERCISE SCIENCES	MSC	106
MCIR 7045-8	INPATIENT REHABILITATION CLINICAL ROTATION	MSC	107
DEPARTMENT OF PHYSIOLOGY			
MFIS 7015-8	METHODS IN NEUROBIOLOGY RESEARCH	MSC	109
MFIS 7018-8	RESEARCH IN PHYSIOLOGY I	MSC	109
DEPARTMENT OF PSYCHIATRY			
MPSI 7010-13	PSYCHIATRIC JUNIOR INTERNSHIP-ADULT	CAROLINA	111
MPSI 7010-2	PSYCHIATRIC JUNIOR INTERNSHIP-CHILD	RCM	112
MPSI 7010-4	PSYCHIATRIC JUNIOR INTERNSHIP	VAH	112
MPSI 7010-20	PSYCHIATRIC JUNIOR INTERNSHIP-ADULT	PANAMERICANO	113
MPSI 7015-02	COMPREHENSIVE CHILD PSYCHIATRY	UDH	114
MPSI 7018-13	ALCOHOL DEPENDENCE	CAR	115
MPSI 7018-04	ALCOHOL DEPENDENCE	VAH	115
MPSI 7019-13	INTRODUCTION TO DRUG DEPENDENCE	CAR	116
MPSI 7019-04	INTRODUCTION TO DRUG DEPENDENCE	VAH	116
MPSI 7025-8	PSYCHIATRIC RESEARCH	MSC	117
MPSI 7026-13	PSYCHIATRIC EMERGENCIES	CAR	118
MPSI 7026-04	PSYCHIATRIC EMERGENCIES	VAH	118
DEPARTMENT OF PUBLIC HEALTH			
SALP 6587-8	CLINICAL MANAG. SEXUALLY TRANSMITTED DIS.	CLETS	120
DEPARTMENT OF RADIOLOGY			
MRAD 7015-10	CLINICAL DIAGNOSTIC RADIOLOGY	MC	122
MRAD 7015-13	CLINICAL DIAGNOSTIC RADIOLOGY	CAROLINA	122
MRAD 7017-10	INT. CLINICAL PRACTICE OF NUCLEAR MEDICINE	HOSP. ONCOLO.	123
MRAD 7017-04	INT. CLINICAL PRACTICE OF NUCLEAR MEDICINE	VAH	123
DEPARTMENT OF SURGERY			
MCIR 7010-1	GENERAL SURGERY SUB INTERNSHIP	UDH	125
MCIR 7010-4	GENERAL SURGERY SUB INTERNSHIP	VAH	126
MCIR 7004-1	TRAUMA SURGERY SUB INTERNSHIP	UDH	127
MCIR 7017-2	PEDIATRIC SURGERY	UPH	128
MCIR 7018-1	CANCER SURGERY	UDH	128
MCIR 7020-1	CLINICAL NEUROSURGERY	UDH	129
MCIR 7025-1	CLINICAL UROLOGY	UDH	129
MCIR 7026-1	GENERAL ORTHOPEDICS CLERKSHIP	UDH	130
MCIR 7026-4	GENERAL ORTHOPEDICS CLERKSHIP	VAH	130
MCIR 7028-1	OTOLARYNGOLOGY - HEAD AND NECK SURGERY	UDH	131
MCIR 7029-18	TRANSPLANT SURGERY AND IMMUNOLOGY	AUX	131

MCIR 7030-1	CLINICAL NUTRITIONAL SUPPORT	UDH	133
MCIR 7035-19	THORACIC/CARDIOVASCULAR SURGERY CLERK	PAVIA	134
RESEARCH			
MCBI 7001	INT. TO RESEARCH BASIC OR CLINICAL SCIENCES	RCM	137
MCBI 7002	RESEARCH IN BASIC OR CLINICAL SCIENCES	RCM	138
MCBI 7003	ADVANCED RES. IN BASIC OR CLINICAL SCIENCES	RCM	139
	APPLICATION FOR RESEARCH BY DEPARTMENT		140
	APPLICATION FOR RESEARCH		141
INTERDISCIPLINARY COURSES			
MISH 7005-8	COMMUNITY-BASED PRECEP. EXTENDED COURSE		143
MISH 7010-8	RESEARCH SEMINAR HISPANIC HEALTH ISSUES	MSC	144
MISH 7017-8	INST./EVALUATION STRATEGIES MED. EDUCATION	MSC	145

Courses Credit hours Legend:

V= courses with variable hours

F= courses with fixed hours

ANESTHESIOLOGY

ANESTHESIOLOGY

MANE 7010-1 Introduction to Anesthesiology and Resuscitation - 80 - 160 hours; two to four full time weeks. (V)

Prerequisite: Have completed and approved second year of Medicine.

The course covers the basic aspects of the specialty and the application of acquired skills and knowledge in the care of the critically ill patient. The student will be able to acquire basic knowledge as to the pre-operative evaluation, intra-operative care, and postoperative care of surgical patients. He/she will also acquire knowledge in the use of anesthetic agents and about the different techniques used in Anesthesiology. Special emphasis will be given to the development of airway management skills. Current resuscitation techniques will be reviewed. Lectures, demonstrations, and practical exercises in the operating room will be used for this purpose.

Person in charge	:	Dr. Myrna I. Morales Franqui
Enrollment	:	4
Dates Offered	:	Throughout the year
Hospital	:	UDH/UPH
Telephone	:	(787) 758-2525 X1918 or 1919
Meeting Place AM	:	Operating Room ASEM Main Central Building
Meeting Place PM	:	Library Anesthesiology Department, 9 th floor, at 3:00PM
Meeting Time	:	7:00 AM
Night Duties	:	Yes
Evaluation	:	Written and Oral Examination

MANE 7015-1 Introduction to Post-Operative Intensive Care - 80 - 160 hours; two to four full time weeks. (V)
Prerequisite: Have completed and approved second year of Medicine.

The student will be able to acquire knowledge and skills about the management of acute complications that may occur during the immediate postsurgical period, by means of lectures, demonstrations and clinical experiences.

The student will also have the opportunity to learn monitoring techniques and the management of problems related to the administration of liquid, and respiratory status, acid-base and electrolytic balance.

Person in charge	:	Dr. Myrna I. Morales Franqui
Enrollment	:	2
Dates Offered	:	By Arrangement
Hospital	:	UDH/UPH
Telephone	:	(787) 758-2525 X1918 or 1919
Meeting Place	:	Anesthesiology Department, 9 th floor, Office A-989
Meeting Time	:	7:00 AM
Night Duties	:	Yes
Evaluation	:	Written and Oral Examination

MANE 7105-1 Research in Anesthesiology – 160 - 192 hours, four full time weeks. (V)
Prerequisite: First level of medicine

During this course the student will have the opportunity to develop research skills through its various steps. Student will participate in an ongoing research or will participate in the development of a new one. Some of the research skills to be developed are: research question, literature revision, design of data gathering sheets, statistical design, data analysis, and proposal redaction, among others. Students will also have the opportunity to integrate, from clinical perspective, acquired knowledge during their first year in medicine. Oral presentation will be required at the end of the course.

Person in charge	:	Dr. Héctor Torres and Reseach Fellow
Enrollment	:	1 to 3 students
Dates Offered	:	By Arrangement
Hospital	:	UDH
Meeting Place	:	Department of Anesthesiology and Library (both at UPR-RCM Building)
Phone	:	787 758-2525, exts. 1918, 1919
Meeting Time	:	8:00 AM to 5:00 PM
Night Duties	:	No
Evaluation	:	Grading System

DERMATOLOGY

DERMATOLOGY

MDER 7010-1 Dermatology in Everyday Practice - 160 hours; four full time weeks.
Prerequisite: Have completed and approved third level Internal Medicine, Pediatrics and Surgery courses.

He/she will participate in all educational activities held at the Department and attend to Dermatology clinics. The most common dermatologic conditions seen on daily practice will be emphasized.

Person in charge	:	Dr. Sheila M. Valentin, Dr. Rafael F. Martín
Enrollment	:	2
Dates Offered	:	August, September, October, November, February, March (Only RCM Students), April and June
Meeting Place	:	Dermatology Section - Fifth Floor Pharmacy Building.
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	A Theme Paper. The student will be evaluated by the staff and The chief of residents taking in consideration his/her performance in the clinics of Dermatology and an oral informal evaluation. Also a presentation of a theme paper with revision of the literature will be required for final grade.

MDER 7010-13 Dermatology in Everyday Practice - 80 - 160 hours: 2 or 4 fulltime weeks.
(V)
Prerequisite: Have completed and approved third level Internal Medicine.
Pediatrics and Surgery courses

He/she will participate in all educational and clinical activities held at the Carolina Hospital. Also may attend the activities held at the Department of Dermatology whenever there were no activities at Carolina. The most common dermatologic conditions seen on daily practice will be emphasized.

Person in charge	:	Dr. Francisco Colón
Enrollment	:	4
Dates Offered	:	Academic year, except December and January
Meeting Place	:	Derma Clinics - Carolina Hospital Monday, Thursday and Friday a.m. at Carolina, pm at Medical Center Río Piedras Tuesday and Wednesday all day at Medical Center Río Piedras
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	A Theme Paper. The student will be evaluated by the staff at the Carolina Hospital and the chief of residents taking in consideration his/her performance in the clinics of Dermatology. Also a presentation of a theme paper with revision of the literature will be required for final grade.

MDER 7015-1 Clinical Investigation in Dermatology - 160 hours, four full time weeks. (F)
Prerequisite: MDER 7010, Internal Medicine and Pediatric Courses.

During this course the student will be assigned a special clinical project. It is expected that he/she will make use of different methods on immunopathology, microbiology, epidemiology and other advanced techniques while working in the Project.

Person in charge	:	Dr. Sheila M. Valles, Dr. Rafael Martin
Enrollment	:	Only 2 student can be enrolled monthly (Only for RCM Medical Students)
Dates Offered	:	August to May, except December and January
Meeting Place	:	Dermatology Office - Fifth Floor, Pharmacy Building
Meeting Time	:	8:00 AM
Evaluation	:	Discussion of findings with resident in charge or attending and preliminary paper required.

EMERGENCY MEDICINE

EMERGENCY MEDICINE

MEMR 7010-13 Principles of Emergency Medicine - 80 hours, summer two weeks. (F)
Prerequisite: Student will be required to have completed and approved their first year medicine.

The course involves a series of lectures skills stations and an ambulance ride. The lecture topics include basic approach to shock, initial evaluation and management of trauma, introduction to emergency medical services, airway management, immobilization of spine and extremities, EKG interpretation and arrhythmia recognition, EM ultrasound and EM procedures. Sessions usually consist of a lecture period followed by hands-on lab.

Person in charge	:	Fernando Soto Torres, MD
Enrollment	:	30
Dates Offered	:	July 6 - 17, 2015
Meeting Place	:	Emergency Medicine Office, 1 st . floor, "Hospital de la Universidad de Puerto Rico", Dr. Federico Trilla-Carolina
Telephone	:	787-750-0930
Meeting Time	:	8:00 AM (Monday – Friday) Emergency Department shifts will be scheduled during the first meeting and will include nights and weekends.
Night duties	:	None
Evaluation	:	30% Post test 70% Attendance and participation

MMED 7057-13 Emergency Medicine 80 - 240 hours; (formal didactics 10/20) two or six consecutive full time weeks. (V)
Prerequisite: Student will be required to have completed and approved third year Internal Medicine, Pediatrics, Surgery and OB-Gyn.

NOTE: This course will be credited with 160 hours as a Required Selective Jr for the UPR School of Medicine fourth year medical students

The student will participate as an active member of the Resident-Faculty Team on the initial evaluation and treatment of patients in the Emergency Department at the Hospital de la Universidad Dr. Federico Trilla, Carolina. He/She will work under direct supervision at all times. Attendance to departmental didactic activities on Wednesday mornings is mandatory. **One week before starting the rotation the medical student must visit the EM Department Office to get clerkship schedule, and electronic medical record password and orientation.**

Person in charge	:	Fernando Soto Torres, MD
Telephone	:	(787) 750-0930
Enrollment	:	Eight (8 per month)
Dates Offered	:	Throughout the Year
Meeting Place	:	Emergency Medicine Department - "Hospital de la Universidad de Puerto Rico" Dr. Federico Trilla, Carolina
Meeting Time	:	8:00AM - 8:00 PM Clinical Shifts: Academic Activity on Wednesday 8:00 AM at "Hospital de la Universidad de Puerto Rico", First Floor in Conference Room.
Clinical Shifts	:	Students will be assigned to a resident-faculty team for four (4) consecutive 12 hr. day shifts and 3 consecutive 12 hr. night shifts with 2 free days in between, some of them will include weekend and holidays.(Scheduled in variable as well as journal article discussions)
Evaluation	:	Based on daily clinical performance and a power point presentation. Participation in the academic activities is also expected. Continuous feedback will be encouraged. Signed attendance list and anonymous E.M. rotation evaluation by the student is required at the end of the clerkship.

MCIR 7055-13 Quality Assurance and Total Quality Management in the Emergency
Department - 160-320 hours. (V)
Pre-Requisites: Have completed and approved Medicine I

During the course the student will be exposing to basic on clinical research, like: literature review, study design, data analysis and scientific writing. The course consists of assign lectures, meetings with course coordinator, and design of a study proposal with the coordinator or assigned Emergency Medicine Faculty.

Person in charge	:	Juan A. González Sánchez, MD, FACEP
Course Coordinator	:	Juan A. González Sánchez, MD, FACEP
Telephone	:	(787) 750-0930
Enrollment	:	By arrangement (all year around)
Dates Offered	:	By arrangement (all year around)
Meeting Place	:	Emergency Medicine Office, 1 st . floor, University of Puerto Rico Hospital, Dr. Federico Trilla, Carolina
Meeting Time	:	8:00 AM
Night Duties	:	NONE
Evaluation	:	Oral and Reading comprehension - 25%
		TQM - Research Project - 50%
		Presentation and Evaluation Sheet - 25%

INTERNAL MEDICINE

INTERNAL MEDICINE

MMED 7010 Clinical Clerkship in Medicine – 80 -240 hours, two - six full time weeks (V)
Prerequisite: Have completed and approved third year Internal Medicine Course.

This is a clinical experience held at the Department of Medicine, University District Hospital or at any other hospital of the Consortium of the School of Medicine. The student will work assigned patients; medical history, physical examination, clinical conclusions and manage the patient under supervision. It is expected that he/she attends all educational activities offered during the clerkship.

NOTE: Space will be shared with the fourth year students registered in the MCUA 7429 160 hours required course. Priority will be given to the fourth year students.

This course is offered in the following hospitals:

Course Number	:	MMED 7010-1
Hospital	:	University District Hospital
Person in charge	:	Dr. Vanesa Sepulveda
Enrollment	:	10*
Dates Offered	:	Throughout the academic year
Meeting Place	:	4th floor, Conference Room
Meeting Time	:	7:15 AM
Telephone	:	754-0101 exts. 3816, 3863
Night Duties	:	Yes, 4 duties (two 24 hour shift / two 16 hour shift) by arrangements with the Chief Residents
Evaluation	:	By attending physician and 2 nd year resident
*Note	:	Arrangements can be made to increase the enrollment with Wanda E. Pizarro (758/2525 ext. 1844)

Course Number	:	MMED 7010-3
Hospital	:	San Juan City Hospital
Person in charge	:	Dr. María de Lourdes Miranda
Enrollment	:	4
Dates Offered	:	Throughout the academic year, except July
Meeting Place	:	Chief Resident's Office
Meeting Time	:	8:00 AM
Telephones	:	765-5147
Night Duties	:	Yes, every 4 night
Evaluation	:	By attending physician and 2 nd year resident

MMED 7010-4

Clinical Clerkship in Medicine - 160 hours, four full time weeks

Prerequisite: Have completed and approved third year in Medicine

This is a clinical experience held at the Veterans' Administration Caribbean Health Care, teaching hospital affiliated to the University of Puerto Rico, School of Medicine. The student will work as part of the clinical team assigned to General Internal Medicine Wards. Under direct supervision, he or she will perform comprehensive medical histories, complete physical exams as well as participate in the clinical decision making processes regarding the management of the assigned patients. The student will perform certain diagnostic and therapeutic procedures. Also, the student will attend all the daily educational activities of the Department of Medicine.

Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	José J. Gutierrez, MD
Alternate	:	Vivian Vargas, MD
Enrollment	:	5
Dates Offered	:	Throughout the academic year
Meeting Place	:	2 nd floor, Morning Reports Auditorium
Meeting Time	:	7:00 AM
Telephone	:	641-7582 ext. 13131
Night Duties	:	Yes, every 5 th night
Evaluation	:	By attending physician and 2 nd year resident

MMED 7010-7

Clinical Clerkship in Medicine - 160 hours, four full time weeks.
Prerequisite: Have completed and approved third year Internal Medicine Course.

This is clinical experience held at the Department of Medicine, University District Hospital or at any other hospital of the Consortium of the School of Medicine. The student will work assigned patients medical history, physical examination, clinical conclusions and manage the patient under supervision. It is expected that he/she attends all educational activities offered during the clerkship.

Hospital	:	Clínica Perea, Inc.
Person in charge	:	Humberto Olivencia, MD
Enrollment	:	1
Dates Offered	:	Throughout the academic year
Meeting Place	:	Faculty Office
Meeting Time	:	8:30 – 10:00 AM (arranged by faculty and student)
Telephone	:	834-0101 ext. 2009
Night Duties	:	Yes, every 4 th night
Evaluation	:	By attending physician

Course Number	:	MMED 7010-13
Hospital	:	UPR Hospital at Carolina
Person in charge	:	Chief Residents
Enrollment	:	6*
Dates Offered	:	Throughout the academic year
Meeting Place	:	5 th floor, Department of Medicine
Meeting Time	:	8:00 AM
Telephone	:	757-1800 exts. 696, 257
Night Duties	:	Yes, 4 duties (two 24 hour shift / two 12 hour shift) by arrangements with the Chief Residents
Evaluation	:	By attending physician
*Note	:	Arrangements can be made to increase the enrollment with Mrs. Wanda E. Pizzaro (758-2525 ext. 1844)

MMED 7015-19 Diagnosis/Management of Cardiovascular Diseases – 80-160 hours,
Two to four full time weeks. (V)
Prerequisite: Have completed and approved second year of Medicine.

The student will work with cardiovascular patients and help in their management, under supervision. Will attend educational activities and cardiovascular procedures held at the University Hospital.

Hospital	:	Cardiovascular Center of Puerto Rico and the Caribbean
Person in charge	:	Pablo I. Altieri, MD
Enrollment	:	4
Dates Offered	:	Throughout the academic year
Meeting Place	:	2 nd floor, Cardiac Catheterization Laboratory
Meeting Time	:	8:00 AM
Telephone	:	754-8500
Night Duties	:	None
Evaluation	:	By attending physician; oral exam and on the basis of knowledge, skills, and attitudes developed in the course

MMED 7016-7 Cardiology and Electrocardiography - 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will attend consultations of vascular patients, under supervision. He/she will get acquainted with electrocardiography interpretations. Will attend activities held at the Cardiology Section at Mayaguez Medical Center.

Person in charge	:	Dr. Marcos A. Velázquez
Enrollment	:	2
Dates Offered	:	By arrangement
Meeting Place	:	CPR Building, De Diego Street #55, Office 303
Meeting Time	:	8:00 - 4:00 and after duty hospital visits
Telephone	:	833-6100
Night Duties	:	Depends of patient and procedures
Evaluation	:	By attending physician; oral and written examinations, clinical evaluation. Also will be graded on the basis of knowledge, skills and attitudes

MMED 7018-3 Cardiovascular Diseases - 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will attend cardiovascular patients and help in their management, under supervision. Will attend the educational activities and cardiovascular procedures held at the San Juan City Hospital.

Hospital	:	San Juan City Hospital
Person in charge	:	Eddie Mieses-Ariza, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year
Meeting Place	:	3 th floor Cardiology Section
Meeting Time	:	8:00 AM week days
Telephone	:	756-7796 / 766-2223
Night Duties	:	Yes
Evaluation	:	The student will be graded on the basis of total performance, working up-patients, the interaction with preceptors, in the various didactic activities and the quality of a short term paper (4-10 pages)

MMED 7020 Coronary Care Unit – 80 to 160 hours, two/four time weeks
Prerequisite: Have completed and approved third year in Medicine

The student will work on patients with coronary heart diseases and will learn from the different clinical variations that they present. He/she will learn to manage patients without complications as well as the most frequent emergencies and complications. The student will learn the fundamental of ECG interpretation in acute coronary patients. He/she will attend the teaching activities held at the Cardiovascular Section.

This course is offered in the following hospitals:

MMED 7020-4 Coronary Care Unit – 80 to 160 hours, two/four full time weeks. (V)
Prerequisite: Have completed and approved third year in Medicine

The student will work on patients with coronary heart diseases and will learn from the different clinical variations that they present. He/she will learn to manage patients without complications as well as the most frequent emergencies and complications. The student will learn the fundamental of ECG interpretation in acute coronary patients. He/she will attend the teaching activities held at the Cardiovascular Section.

Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	José Escabí, MD
Alternate	:	Luis Rodríguez Ospina, MD Sonia Vicenty, MD José Suárez, MD José Acevedo, MD
Enrollment	:	1 every 4 week period
Dates Offered	:	Throughout the academic year
Meeting Place	:	1 st floor SBT,, Coronary Care Unit
Meeting Time	:	7:00 AM
Telephone	:	641-7582 ext. 31788
Night Duties	:	None
Evaluation	:	By attending physician; based on daily performance

Course Number	:	MMED 7020-19
Hospital	:	Cardiovascular Center of Puerto Rico and the Caribbean
Person in charge	:	Rafael Calderón, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year
Meeting Place	:	3 rd floor, Cardiac Care Unit
Meeting Time	:	8:00 AM
Telephone	:	754-8500
Night Duties	:	None
Evaluation	:	The student will be evaluated by the sponsor on the basis of knowledge, skills and attitudes developed during the course.

MMED 7026 Clinical Clerkship in Endocrinology and Diabetes - 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will work on patients with endocrine disorders and will learn to manage them under supervision. Will attend the educational activities held at the Endocrinology Section, University District Hospital. He/she will learn to interpret tests related to this subspecialty of Medicine.

This course is offered in the following hospitals:

Course Number	:	MMED 7026-1
Hospital	:	University Hospital
Person in charge	:	Myriam Allende, MD
Alternate	:	Margarita Ramírez, MD
Enrollment	:	1
Dates Offered	:	Throughout the academic year except, December, January and July
Meeting Place	:	Ground Floor, Endocrinology Section
Meeting Time	:	8:00 AM
Telephone	:	754-0101 ext. 3622
Night Duties	:	None
Evaluation	:	The student will be evaluated on the basis of knowledge, skills and attitudes both formal and informally throughout the elective.

MMED 7026-3 Clinical Clerkship in Endocrinology and Diabetes 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will be exposed to a wide variety of Endocrine disorders under the supervision of Attending and Fellows in training. They will be exposed to an integrated form of evaluation where importance is given to all the medical problems of the patients besides their endocrine concern. They will participate in a unique diabetes management program utilizing telemedicine techniques and a dynamic weight reducing program utilizing VLCD. They will attend at least one Thyroid-Nuclear Board, one Pediatrics Adolescent Clinic, and one OB-Gin Endocrinology Clinic. They will evaluate patients in consultation and obtain some experience in performing fine needle aspiration biopsies of the thyroid gland.

Hospital	:	San Juan City Hospital
Person in charge	:	Eva Gonzalez, MD
Enrollment	:	1
Dates Offered	:	Throughout the academic year
Meeting Place	:	Adult Endocrinology Division, Department of Medicine
Meeting Time	:	8:00 AM
Telephones	:	765-5147
Night Duties	:	Yes
Evaluation	:	The student will be evaluated on the basis of knowledge, skills and attitudes developed during the course.

MMED 7027-1 Diagnosis/Management of Gastrointestinal, Hepatitis and Liver Diseases – 80 - 160 hours; four full time weeks. (V)
Prerequisite: Have completed and completed third year Internal Medicine Course.

The student will work on patients with gastrointestinal diseases and will learn to manage them under supervision.

Hospital	:	University Hospital
Person in charge	:	Víctor Carlo, MD
Enrollen	:	2
Dates Offered	:	Throughout the academic year, except May
Meeting Place	:	4 th floor, Gastrointestinal Section,
Meeting Time	:	8:00 AM
Telephone	:	751-2551
Night Duties	:	None
Evaluation	:	The student will be evaluated using the standard evaluation form

MMED 7028-4 Clinical Gastroenterology - 80 - 320 hours, two/eight full time weeks. (V)
Prerequisite: Have successfully completed and approved third year Internal Medicine Course.

This is an elective course geared to present in an updated manner, the physiology, path physiology, diagnosis and management of the gastrointestinal diseases. During this elective course, the student will have the opportunity to be exposed to a large variety of gastrointestinal and hepatic diseases throughout the evaluation of patients in different settings, both hospitalized and ambulatory. The student will be under the direct supervision of staff Gastroenterologists. The student will also have the opportunity to observe a large variety of endoscopic procedures in a state of the art Gastroenterology Laboratory. In the Lab he will be able to correlate the history and physical findings of the patients with the video images of the actual findings in the GI tract, a real in vivo clinic pathological correlation. As part of this academic geared rotation, the student will participate in weekly multidisciplinary academic activities in which Radiology, Pathology and Surgery are also actively involved. The student has available audiovisual materials, books and journals to complement their experience during the rotation. The goal of the rotation is that students learn about gastrointestinal disorders and enjoy the process of learning.

Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	Jaime Martínez-Souss, MD
Alternate	:	María I. Dueño, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year
Meeting Place	:	Gastroenterology Section - OPA Building
Meeting Time	:	7:30 AM
Telephone	:	641-7582 ext. 31591
Night Duties	:	None
Evaluation	:	The student will be evaluated by sponsors on the basis of their knowledge, skills and attitudes developed during the course.

MMED 7029-1 Clinical and Laboratory Aspects on Hematology and Oncology - 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will act as an intern, under supervision, in the Leukemia and Bone Marrow Units. He/she will attend the educational activities, the clinics (hematology, medical oncology and bone marrow transplant). The outpatient procedure sessions and, if shows interest, will be able to participate in clinical research programs, always under the supervision of the Hematology-Medical Oncology Section, University Hospital (San Juan).

Hospital	:	University Hospital
Person in charge	:	Eileen Pacheco Navarro, MD
Enrollment	:	2
Dates Offered	:	September, October, November, February, March, April and May
Meeting Place	:	Ground floor, Hematology-Medical Oncology Section
Meeting Time	:	8:00 AM
Telephone	:	754-0101 ext. 3893
Night Duties	:	None
Evaluation	:	The student will be graded on his attitudes and daily performance.

MMED 7030-3 Hematology/Oncology - 160 hours, four full time weeks. (F)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student works on Hematology/Oncology patients. Will participate in the readings of peripheral blood and bone marrow smears; will attend teaching activities held, and, if he/she so wishes, will participate on research projects under the supervision of the Hematology/Oncology Section at San Juan City Hospital. Will be responsible for presenting cases at the TPC (Treatment Planning Conference) every Thursday morning. They will be encouraged to participate in 1 of the 2 weekly Tumor Board Conferences.

Hospital	:	San Juan City Hospital
Person in charge	:	Luis Baez, MD
Alternate	:	William Caceres, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year, except July and December
Meeting Place	:	Ground, Hematology/Oncology Section
Meeting Time	:	8:00 AM
Telephone	:	765-5147 / 641-3693
Night Duties	:	None
Evaluation	:	The student will be graded on his attitudes and daily performance.

Course Number	:	MMED 7030-04
Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	William Caceres, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year, except July and December
Meeting Place	:	Hematology/Oncology Section
Meeting Time	:	8:00 AM
Telephone	:	641-3693, 765-5147
Night Duties	:	None
Evaluation	:	The student will be graded on his attitudes and daily performance.

MMED 7035 Infectious Diseases and Parasitology – 160-320 hours; four to eight full time weeks. (V)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student is part of the Infectious Disease Consult Team, composed of a Resident, a Fellow and a Staff ID Faculty Member. The student serves as a consultant with a minimum of four consults per week, having the responsibility for answering the consult and writing recommendations, always under a one to one supervision of the Fellow. The student presents the case should read about the problem and write the progress notes on his patients. The student is exposed to antibiotic use, indications, contraindications, combinations and or the diagnosis, management and follow up of bacterial, mycotic and viral diseases including AIDS. The student will become familiar with gram stains and their interpretation and have available the audiovisual library of the ID Program for in house review. Irrespective of which hospital serves as base, the student will have the same activities, including ID Services on Tuesdays, ID Journal Club and University Hospital VA Rounds on Thursdays; and Case discussion/Pulmonary conference and ID Pediatrics Hospital rounds on Fridays.

This course is offered in the following hospitals:

Course Number	:	MMED 7035-01
Hospital	:	University Hospital
Person in charge	:	Carlos Sánchez, MD
Alternate	:	Jorge Bertran, MD, Jorge Santana, MD Ruth Soto, MD Michelle González, MD Humberto Guiot, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year
Meeting Place	:	Infectious Diseases Section, 4 th floor, Office 406
Meeting Time	:	8:00 AM
Telephones	:	754-0101 ext 2421
Night Duties	:	None
Evaluation	:	Based on performance, evidence of reading, presentations, write ups, follow ups, interest, attendance. Preparation of a single topic review in written form of a topic of interest for the student. Topic to be selected at the beginning of the rotation and presented to Dr. Carlos Sánchez or ID attending on charge for the University Hospital Rotation.

Course Number	:	MMED 7035-4
Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	Glenda González, MD
Altérnate	:	Sonia Saavedra, MD
	:	Mérida Colón, MD
	:	Ms. Margarita Hernández
Enrollment	:	1
Dates Offered	:	Throughout the academic year
Meeting Place	:	Room 8A, 8 th floor, Infectious Diseases Section
Meeting Time	:	8:00 AM
Telephone	:	641-7582 ext.18111
Night Duties	:	None
Evaluation	:	Based on performance, evidence of reading, presentations, write ups, follow ups, interest, attendance. Preparation of a single topic review in written form of a topic of interest for the student. Topic to be selected at the beginning of the rotation and presented to the ID attending on charge for the rotation. The student will have rounds at University Hospital, VA or Pediatrics Hospital, academic activities, Journal Clubs, and seminars.

MMED 7036-1 Nephrology - 160 hours; four full time weeks. (F)
 Prerequisite: Have completed and approved third year Internal Medicine Course.

He/she will study electrolytes, acid base disturbances, principles of renal dialysis and the most common nephrological syndromes and its clinical manifestations. He/she will attend teaching activities held at the Renal Section, University Hospital.

Hospital	:	University Hospital
Person in charge	:	Carlos G. Rivera-Bermúdez, MD
Alternate	:	
Enrollment	:	2
Dates Offered	:	Throughout the academic year
Meeting Place	:	3 rd floor, Nephrology section
Meeting Time	:	8:00 AM
Telephone	:	754-0101 exts. 2300, 2301
Night Duties	:	None
Evaluation	:	The student will be graded based in case presentation on his attitudes and daily performance.

MMED 7037 Clinical Neurology - 80 - 160 hours, two - four full time weeks. (V)
Prerequisite: Have completed and approved third year Internal Medicine Course

The student works on patients with neurological diseases under the supervision of ambulatory care and ward neurology attending physicians. Basic Neuroscience concepts are reviewed in the context of patients' problems. Students will develop knowledge, skills and attitudes necessary to deal with common neurological conditions. He/she will learn the indications for neurological diagnostic tests. The students will be given the opportunity to participate in the weekly lectures, conferences, seminars brain cutting sessions, and workshops held at the Neurology Section.

The neurology staff consists of highly qualified Neurologists with varied subspecialties and areas of interest as is Neuro-Oncology, Stroke, Neuromuscular Medicine, Epilepsy, Neurophysiology and Movement Disorders.

This course is offered in the following hospitals:

Course Number	:	MMED 7037-01 – 160 hours
Hospital	:	University Hospital
Person in charge	:	Gishlaine Alfonso, M.D.
Enrollment	:	2
Dates Offered	:	Throughout the academic year, except end of December and the first two weeks of January
Meeting Place	:	Neurology Section, 5 th Floor
Meeting Time	:	8:00 AM
Telephone	:	754-0101 ext. 2507
Night Duties	:	None
Evaluation	:	The student will be evaluated by faculty on the basis of knowledge, skills, and attitudes. The formative evaluation will be ongoing using case presentations and discussions, and small group and individual assessment techniques. The final evaluation will be a summative assessment of student's progress during the course using the instrument provided by the curriculum office.

Course Number	:	MMED 7037-3
Hospital	:	San Juan City Hospital
Person in charge	:	Katherine Padilla, MD and Abiezer Rodríguez, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year, except July and December
Meeting Place	:	Department of Medicine
Meeting Time	:	8:00 AM
Telephone	:	765-5147
Night Duties	:	None
Evaluation	:	Oral exam

MMED 7037-4 Neurology – 80-160 hours, two to four full time weeks (V)
Prerequisite: Have completed and approved third year in Medicine

The student works on patients with neurological diseases, under direct supervision by Neurology resident and Staff Neurologist. He/she will have the opportunity to study basic concepts about Neurophysiology, Neuropathology and Neuroradiology. The students are exposed specially to patients with Cerebrovascular, Dementia, Movement Disorder, Epilepsy, Neuromuscular and Sleep Disorder Conditions. Emphasis is given to diagnosis, acute management and treatment modalities.

The neurology staff consists of several Neurologists some of them with subspecialties in the area of Neuro-Oncology, Stroke and Neuromuscular Medicine. There is also a Neurophysiology Laboratory where EEG's and Polysomnograms (sleep studies) are performed.

The Neurology Team participates in activities with the Radiology Staff where the student is exposed to CT Scan, MRI, MR-angiography and digital subtraction angiography studies. Also, we have an active interaction with Medicine, Rehabilitation Medicine, Psychiatry and Psychology Services.

Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	Glen Garayalde, MD
Enrollment	:	1
Dates Offered	:	Throughout the academic year
Meeting Place	:	Neurology Section, OPA Building
Meeting Time	:	8:00 AM
Telephone	:	641-7582 ext. 31699
Night Duties	:	None
Evaluation	:	The student will be evaluated on the basis of knowledge, skills, attitudes development during the course, oral examination.

MMED 7039 Diagnosis and Management of Pulmonary Diseases - 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The students will work on patients with respiratory problems including adolescent patients. He/she will be exposed to problems in pulmonary diseases and procedures of the specialty. It is expected that he/she will attend the educational activities held at the Pulmonary Section, University District Hospital.

This course is offered in the following hospitals:

Course Number	:	MMED 7039-01
Hospital	:	University Hospital
Person in charge	:	Dr. Angel Laureano
Enrollment	:	2
Dates Offered	:	Throughout the academic year
Meeting Place	:	4 th floor, Pulmonary Section
Meeting Time	:	8:00 AM
Telephone	:	754-0101 ext. 3750
Night Duties	:	None
Evaluation	:	The student will be evaluated by proctors on the basis of written presentations of pulmonary cases or themes to his/her proctor, and on the basis of knowledge, skills and attitudes developed during the course.

MMED 7039-4 Diagnosis and Management of Pulmonary Diseases - 160 hours; four full time weeks. (V)
Prerequisite: Have completed and approved third year in Medicine

For four weeks, the students will be part of the pulmonary disease consultation service. They will be part of the evaluation of patients with a myriad of respiratory diseases in the inpatient and outpatients setting. The weekly ambulatory clinic, medical and surgical wards, medical surgical and respiratory intensive care units will be the areas where patient exposure will take place. Firsthand experience in performance and interpretation of pulmonary function testing, pulmonary bronchoscopy, pleural biopsy will be obtained by the student. A seminar on any respiratory related theme is required at the end of the rotation and attendance to the weekly pulmonary diseases conference are also required.

Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	William Rodríguez, MD
Dates Offered	:	Throughout the academic year
Enrollment	:	Two every 4 week period
Meeting Place	:	Pulmonary Section – OPA Building
Meeting Time	:	8:00 AM
Telephone	:	641-7582 ext. 31644
Night Duties	:	None
Evaluation	:	Daily rounds and evaluated by sponsors on the basis of knowledge, skills and attitudes developed during the course.

MMED 7040-7 Clinical Pneumology, 80 to 160 hours, two/four full time weeks
Prerequisite: have completed third year Internal Medicine Course

The student will work on patients with pulmonary pathology problems or diseases. He/she will attend the educational activities held at the Section, Mayaguez Medical Center.

Person in charge	:	Julio Toro-Pagán, MD/Antonio Padua, MD
Dates Offered	:	Throughout the academic year
Enrollment	:	3
Meeting Place	:	6 th floor, conference room, Mayaguez Medical Center
Meeting Time	:	8:00 AM
Telephone	:	
Night Duties	:	None
Evaluation	:	Oral exam

MMED 7045-1 Basic and Clinical Rheumatology - 80 -160 hours. (V)
Prerequisite: Have completed and approved third year Internal Medicine Course.

This elective course consists of a clinical exposure to the musculoskeletal and autoimmune connective tissue disorders, with emphasis on the latest diagnostic and treatment advancements. The students will be exposed to special procedures such as intra-articular aspirations and injection of joints, bursas, tendons, ligaments and trigger points. He/she will attend the teaching activities held at the Rheumatology Division.

Hospital	:	University Hospital
Person in charge	:	Luis M. Vilá, MD
Alternate	:	Vanessa Rodríguez, MD
Enrollment	:	2
Dates Offered	:	Throughout the academic year, except January
Meeting Place	:	Room A829, Main Building, Medical Sciences Campus
Meeting Time	:	8:00 AM
Telephones	:	758-2525, ext. 1825
Night Duties	:	None
Evaluation	:	The student will be evaluated by the Rheumatology faculty on the basis of knowledge, skills and attitudes developed during the course. At the end of the elective, the student must approve a written examination in general rheumatology.

MMED 7046 General Intensive Care - 160 hours, four full time weeks
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will perform clinical histories and physical examinations in critically ill patients. He or she will participate in the diagnosis and treatment of such conditions that merit intensive care. He or she will be able to perform procedures under supervision, such as management of pulmonary venous catheters, management of mechanical ventilators, interpretation of electrocardiograms, pulse oxymetry, etc. The student will interact with consulting support services such as: Radiology, Cardiology, Pulmonary, and Nephrology subspecialists, among others. They will attend the teaching activities of the Intensive Care Unit.

This course is offered in the following hospitals:

Course Number	:	MMED 7046-04
Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	Jesús Casals, MD
Enrollment	:	1 every 4 week period
Dates Offered	:	Throughout the academic year
Meeting Place	:	1 st floor, Medical Intensive Care Unit
Meeting Time	:	7:00 AM
Telephone	:	641-7582 ext. 31644
Night Duties	:	Yes, 2 calls in 4 weeks
Evaluation	:	The student will be evaluated on the basis of knowledge, skills and attitudes developed during the course.

MMED 7046-18 General Intensive Care, 160 hours, four full time weeks
Prerequisite: Have completed and approved third year of medicine.

The student will familiarize him/herself with the diagnosis and treatment of such conditions that merit intensive care. He/she will be able to perform procedures under supervision. he/she will attend teaching activities held at the intensive care unit, va hospital.

Hospital	:	Auxilio Mutuo
Person in charge	:	Alvaro Aranda, MD
Enrollment	:	1
Dates Offered	:	Throughout the academic year, except June, July, November and January
Meeting Place/Time	:	By arrangement
Telephone	:	781-4546, 200-4545
Night Duties	:	Optional & for sleep studies experience
Evaluation	:	Attitudes developed during the course, disposition, leadership, knowledge and participation.

MMED 7047-9 Outpatient Department Clinical Experience - 80 - 160 hours; two/four full time weeks. (V)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will work on and manage patients at Outpatient Department Clinics, under supervision. Will attend the educational activities held at the clinics and at the Internal Medicine Department, University District Hospital.

Person in charge	:	Roberto Ruiz-López, MD
Enrollment	:	4
Dates Offered	:	Throughout the academic year, except Holy Week (all week); December 15 until January 15; last week of July; and Thanksgiving week (all week)
Meeting Place	:	Area 15, Out-patient Department, Medical Center
Meeting Time	:	8:00 AM
Telephone	:	777-3535 ext. 6373
Night Duties	:	None
Evaluation	:	The student will be evaluated by the attending staff according to his / her performance, attitude, knowledge and skills.

MMED 7048-4 Renal Metabolic Course – 80 - 160 hours, two or four full time weeks. (V)
Prerequisite: Have completed and approved third year Internal Medicine Course.

The student will attend rounds in the renal ward and will follow patients in the renal consult service at the VA Hospital (including cases in the medical/surgical intensive care units). The student will be exposed to a myriad of electrolyte/acid-base disturbances and acute/chronic renal failure patients. The student will also attend the weekly renal and kidney transplant clinic (1-2 case per session) and the journal club and conferences.

Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	Héctor Cordova, MD
Alternate	:	Carlos Rosado, MD
Enrollment	:	2
Dates Offered	:	By arrangement
Meeting Place	:	Renal Section, Room 609
Meeting Time	:	8:00 AM
Telephone	:	641-7582 ext. 16105
Night Duties	:	None
Evaluation	:	The overall evaluation will follow the scheme used for medical interns, adapted for students.

MMED 7060-13 Geriatric Medicine Clerkship – 80 to 160 hours; two to four full time weeks. (V)
Prerequisite: Have completed and approved third year of Internal Medicine Course.

Students will have the opportunity to discuss and analyze topics in the field of Geriatrics. Some topics that will be discuss are: clinical implications of the aging process, differential diagnosis and management of the elderly. Course include clinical practice at Nursing Homes, Veterans' Administration Caribbean Healthcare System and UPR Hospital at Carolina. Forty hours of theory and 120 hours of clinical practice.

Hospital	:	UPR Hospital at Carolina
Person in Charge	:	Juan Rosado, MD
Enrollment	:	4
Dates Offered	:	Throughout the academic year
Meeting Place	:	Office A-830, Geriatric Education Center, Medical Sciences Campus
Meeting Time	:	9:00 AM
Telephone	:	758-2525 ext. 1880
Night Duties	:	None
Evaluation	:	Case presentations, clinical supervision, written papers.

MMED 7080-8 Research in Gastroenterology – 160 – 320 hours, four to eight full time Weeks. (V)
Pre-Requisite: Have completed and approved Medicine I

The student will be assigned to participate in one or more clinical research projects of the Gastroenterology Research Unit. The student will be part of the research team, including the principal investigator (preceptor), research fellow, statistician-epidemiologist co-investigators and auxiliary personnel. Duties will be according to his level of skills, and may include search of the literature, participation in study design, patient interviews, record review, data recording, computerized statistical analysis, sampling, and presentations.

Hospital	:	University Hospital
Person in charge	:	Esther Torres, MD, MACP, MACG
Enrollment	:	3
Dates Offered	:	By arrangement
Meeting Place	:	4 th floor, Gastroenterology Research Unit
Meeting Time	:	8:00 AM
Telephone	:	754-0101 ext. 3192, 3193
Night Duties	:	None
Evaluation	:	Presentation of research work and evaluation of daily work by proctors.

MMED 7085-4 Tuberculosis Clinical Education 80 - 160 hours, two/four full time weeks (V)
Pre-Requisite: Have completed and approved Medicine I

The student will see under faculty supervision tuberculosis cases in the Río Piedras Tuberculosis Clinic. Conferences about the current management of tuberculosis diseases will be given, as well as articles from scientific journals. Besides, the student will spent time getting acquainted with Tb diagnostic techniques at the Puerto Rico Health Department and San Juan Veterans Affairs Medical Center Tb Laboratory.

Hospital	:	Veterans' Administration Caribbean Healthcare System
Person in charge	:	William Rodríguez, MD
Enrollment	:	3
Dates Offered	:	Throughout the academic year
Meeting Place	:	Pulmonary Section – OPA Building
Meeting Time	:	9:00 AM
Telephone	:	641-7582 ext. 31644
Night Duties	:	None
Evaluation	:	Direct observation of student performance and presentation of a Seminar

MMED 7086-8 Introduction to Organ and Tissue Donation - 80 - 160 hours, two/four full time weeks. (V)
Pre-Requisite: Have completed and approved Medicine I

The student will spend between 2-4 weeks participating in all activities related to organ and tissue donation and procurement by lifelink of puerto rico. These will include an orientation about the process, attendance to all educational or administrative activities in the office or the community, participation with vascular coordinators in the evaluation of referrals, the donation process, and the organ or tissue procurement from donors. The student evaluation will include attendance, attitudes, interest, professionalism, humanism and an activities roster. Ethical and humanistic aspects of organ donation will be emphasized. The student will have reading assignment on the subjects of donation and transplantation.

Person in charge	:	Esther Torres, MD, MACP, MACG
Alternate	:	
Enrollment	:	1
Dates Offered	:	Throughout the academic year, except July and Christmas Holidays
Meeting Place	:	LifeLink, of Puerto Rico, Daimler Chrysler Bldg. Suite 100 Metro Office Park, Guaynabo, PR. On the first day, the student must Report to the office of Dr. Esther Torres at the GI Research Unit, 4th floor University Hospital at 8:00 AM
Meeting Time	:	By arrangement
Telephone	:	277-0900
Night Duties	:	On call for donation
Evaluation	:	20% Observation by preceptors, 20% Attendance to didactic and clinical activities, 60% Activities roster and report 100%

FAMILY MEDICINE

FAMILY MEDICINE

MMFA 7010-13 Clinical Clerkship in Family Medicine – 80-240 hours
two to six full time weeks. (V)
Prerequisite: Have completed and approved third level Internal Medicine
and Pediatrics

NOTE: This course will be credited with 160 hours as a Required Selective Jr for the UPR School of Medicine fourth year medical students

The student will participate in the management of hospitalized patients at the Family Medicine Inpatient Department as a member of the health care team providing comprehensive care to these patients. He/she will be exposed to all the hospitalized patients regardless of their age, sex or pathology, thus obtaining experience on the breadth of care characteristic of family medicine. The student will perform histories and physicals on his/her assigned patients, conduct simple diagnostic and/or therapeutic procedures, and initiate and participate in consultations with other disciplines in the management of their patients. In conjunction with the attending staff and residents, he/she will discuss, decide, and manage in accordance to the plan of action to be taken for the patients admitted under his/her care. The student is also expected to participate in the various didactic activities routinely conducted in a hospital setting such as: morning rounds, case presentations, seminars, etc.

The student will also be assigned specific patients at the emergency room for their initial evaluation, diagnostic work up, management and final disposition under the supervision of Family Practice Staff.

Person in charge	:	Dr. Miguel Maldonado
Enrollment	:	1
Dates offered	:	Throughout the Year
Hospital	:	UPR Hospital
Meeting Place	:	By arrangement with Proctor assigned
Meeting Time	:	7:30 AM
Night Duties	:	Yes, every 4th night
Evaluation	:	The student will be evaluated by the attending physician in Consultation with the residents on the basis of knowledge, interest in work; skills, quality of work, attitudes and teamwork.

This same course is offered at:

Course Number	:	MMFA 7010-24 – Manati Alejandro Otero Hospital
Person in charge	:	Dr. Luis Rosa Toledo
Enrollment	:	2
Evaluation	:	The student will be evaluated by the attending physician in consultation with the residents on the basis of knowledge, interest in work; skills, quality of work, attitudes and teamwork.

Course Number	:	MMFA 7010-25 - Bella Vista Hospital
Person in charge	:	Dr. Luis Vega
Enrollment	:	1
Evaluation	:	The student will be evaluated by the attending physician in Consultation with the residents on the basis of knowledge, interest in work; skills, quality of work, attitudes and teamwork.

*MMFA 7016 Family Practice in the Community - 80 to 160 hours, two to four weeks. (V)
Prerequisite: Have completed and approved first year of medicine

The aim of this course is to provide the students an opportunity to work at a community health center under the supervision of a family physician and other members of the health care team. This course is offered to students at the end of their first or second year, usually during the summer months.

The duties assigned to the students are commensurate to their level of training. These may include observation of interactions with patients by members of the health care team, as well as direct patient contact under supervision. These experiences encountered during this course will complement the lecture/seminar material on family practice given to the students during the pre-clinical years.

Person in charge	:	Predoctoral Coordinator, 8th. floor, Medical Sciences Campus
Enrollment	:	1-4 depending on selected center
Dates Offered	:	Throughout the year
Meeting Time	:	By arrangement
Night Duties	:	No
Evaluation	:	Daily performance according to student level, degree of responsibility shown, attendance and punctuality.

This course is offered in the following centers:

1	:	Aibonito - Menonita General Hospital
Person in charge	:	Lumen Vera, MD
Telephone	:	735-8001 Fax: 735-8077
Dates Offered	:	Throughout the Year
Enrollment	:	1 student
Meeting Place	:	8:00 AM
Lodging	:	No
Night Duties	:	No
Evaluation	:	Daily performance according to student level, degree of responsibility shown, attendance and punctuality.

4	:	Castañer General Hospital Apartado 1003 Castañer, PR 00631
Person in charge	:	José O. Rodríguez Ramos, M.D.
Telephone	:	829-5010 Fax: 829-2913
Enrollment	:	3 students
Dates Offered	:	Throughout the Year
Lodging	:	Yes
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Daily performance according to student level, degree of responsibility shown, attendance and punctuality.

5 : Barceloneta Atlantic Medical Center
 Person in charge : Laura Rolón, M.D.
 Enrollment : 2 students
 Date Offered : Throughout the Year
 Meeting Time : 8:00 AM
 Lodging : No
 Evaluation : Daily performance according to student level, degree of responsibility shown, attendance and punctuality.

13 : Concilio Integral de Salud de Loíza
 Apartado 509
 Loíza, PR 00772
 Person in charge : Dra. Astrid Morales
 Telephone : 876-7415 Fax: 876-7416
 Dates Offered : Throughout the Year
 Enrollment : 3 students
 Meeting Time : 8:00 AM
 Lodging : No
 Night Duties : No
 Evaluation : Daily performance according to student level, degree of responsibility shown, attendance and punctuality.

15 : Migrant Health Center Mayaguez
 San Sebastian and Isabela
 Person in charge : Efraín Arroyo, MD, Norma Rivera, MD, Ismael Sepúlveda, MD
 Telephone : Migrantes - 805-2920
 San Sebastian - 896-1665
 Enrollment : 1-2 students per Center
 Dates Offered : Throughout the Year
 Lodging : No
 Meeting Time : 8:00 AM
 Night Duties : No
 Evaluation : Daily performance according to student level, degree of responsibility shown, attendance and punctuality.

Also, arrangements can be made for the towns of Rincón.

26 : Rincón Health Center
 Person in charge : Edgar Rodríguez, MD
 Telephone : 823-5500, 823-5555
 Enrollment : 1
 Dates Offered : Throughout the Year
 Lodging : No
 Meeting Time : 8:00 AM
 Night Duties : No
 Evaluation : Daily performance according to student level, degree of responsibility shown, attendance and punctuality.

MMFA 7019 -08 Family Practice Preceptorship - 80 to 160 hours; two to four full time weeks.

Prerequisite: Have completed and approved first year of medicine.

This elective is aimed to acquaint the student with the practice of family physician in a private office. The student will participate in all types of activities conducted by the family physician either at the office, hospital or academic setting as well as home visits and consultation with community agencies and other specialties.

Person in charge	:	Predoctoral coordinator
Enrollment	:	1 student per selected physician's office
Dates Offered	:	Throughout the year
Meeting time	:	By arrangement with Family Medicine Department
Meeting place	:	By arrangement at Physicians Office
Evaluation	:	Knowledge and skills demonstrated according to student level, Interest in work and participation in the various activities held.

OBSTETRICS AND GYNECOLOGY

OBSTETRICS/GYNECOLOGY

MOBG 7010-1 Applied Obstetrics/Gynecology – 80-240 hours, two to six full time weeks. (V)
Prerequisite: Have completed and approved third year OB-Gyn Course.

NOTE: This course will be credited with 160 hours as a Required Selective Jr for the UPR School of Medicine fourth year medical students

The main goal is to prepare the student in early recognition, understanding diagnosis and management of the diseases of the female genital tract. He/she too will become acquainted with normal and abnormal conditions related to pregnancy. Emphasis will be made with the relationship of these conditions and the rest of the systems and medical specialties.

Person in charge	:	Dr. José Hawayek
Enrollment	:	4
Dates Offered	:	Throughout the Year
Hospital	:	University District Hospital, 2 nd . floor, Labor Room Conference Room
Meeting Time	:	By arrangement
Night Duties	:	Floater rotation 1 week and one weekend day
Evaluation	:	The student will be evaluated utilizing the same criteria as those used for residents and interns making the proper adjustments for the level of training.

This same course is offered in the following hospitals:

Course Number	:	MOBG 7010-3
Hospital	:	San Juan City Hospital
Person in charge	:	Dr. Edgardo Rivera Rosa
Enrollment	:	2

Course Number	:	MOBG 7010-13
Hospital	:	University of Puerto Rico Hospital, Carolina
Person in charge	:	Dr. Javier Burgos Cotto
Enrollment	:	2

MOBG 7015-1 Applied General Gynecology – 80-240 hours, two to six full time weeks.(V)
Prerequisite: Have completed and approved third year OB-Gyn Course.

To familiarize the student with the most important diseases of the reproductive female tract. It is designed to diagnose, manage and know the diseases related to general gynecology and obstetrics. The student will have the same responsibilities as an intern. He/she will attend to gynecological clinics, emergency room, lectures and case presentations.

Person in charge	:	Dr. José Hawayek
Enrollment	:	2
Dates Offered	:	Throughout the Year
Hospital	:	UDH
Meeting Place	:	2nd. floor, UDH, Labor Room Conference Room
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	The student will be evaluated utilizing the same criteria as those Used for interns and residents making the proper adjustments for the level of training.

This same course is offered in the following hospitals:

Course Number	:	MOBG 7015-3
Person in charge	:	Dr. Edgardo Rivera Rosa
Hospital	:	San Juan City Hospital
Enrollment	:	2

MOBG 7015-9 Outpatient Clinic -Gynecology - 80 - 240 hours, two to six full weeks. (V)
Prerequisite: Have completed and approved third year OB-Gyn Course.

During this rotation the student will be exposed to the patients in the Obstetrics Gynecology Outpatients Clinics. He will have the opportunity of evaluating patients with non emergency problems or for follow up visits concerning their specific problem. Also, the student will participate in the departmental teaching activities during the weeks.

Person in charge	:	Dr. José Hawayek
Enrollment	:	2
Dates Offered	:	Throughout the Year
Meeting Place	:	2 nd . floor, UDH, Labor Room Conference Room
Meeting Time	:	8:00 AM
Evaluation	:	Daily work.

MOBG 7016-1 Applied Gynecology Oncology - 160 hours, four full time weeks. (F)
Prerequisite: Have completed and approved third year OB-Gyn Course.

This elective course enables the student to get acquainted with the most common malignant processes in the reproductive female tract. It is designed to diagnose and manage those conditions. The student will participate in the outpatient clinics of general gynecology, emergency room, case presentations, and journal club discussions. He/she will attend surgical procedures relative to this sub-specialty.

Person in charge	:	Dr. Sharee Umpierre
Enrollment	:	1 student
Dates Offered	:	Academic Year, except January and December, June and July
Hospital	:	UDH
Meeting Place	:	2 nd . floor, UDH, Labor Room Conference Room
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	The student will be evaluated utilizing the same criteria used for evaluating interns and residents making the proper adjustments for level of training.

MOBG 7017-3 Applied Obstetrics – 80-240 hours, two to six full time weeks. (V)
Prerequisite: Have completed and approved third year OB-Gyn Course.

This course aims to familiarize the student with the most important conditions that occur in normal and complicated pregnancies. Most of the time will be allotted to attend at Prenatal and Post Natal Clinics, and at the delivery rooms. The student will show the same tasks as PGY I (Intern) under the direct supervision of Residents. He/she will get acquainted with fetal monitoring, sonography and amniocentesis as diagnostic procedures.

Person in charge	:	Dr. Edgardo Rivera Rosa
Enrollment	:	2
Dates Offered	:	Academic Year
Hospital	:	San Juan City Hospital
Meeting Place	:	Dr. Rivera's Office
Meeting Time	:	8:00 AM
Evaluation	:	The student will be evaluated utilizing the same criteria used for evaluating interns and residents making the proper adjustments for level of training.

MOBG 7018-1 Fetal Maternal Medicine – 80 – 240 hours, two to six full time weeks. (V)
Prerequisite: Have completed and approved third year OB-Gyn Course.

The purpose of this elective is to expose the medical students to an experience in the management for high risk pregnancies. Emphasis is made on the evaluation and management of the high risk pregnant woman. The activities will be held at the Prenatal and Delivery wards and at the prenatal high risk and Antenatal Evaluation Unit. He/she will share the same tasks as a PGY I (Intern).

Person in charge	:	Dr. Alberto de la Vega
e-mail	:	delavega.alberto@yahoo.com
Hospital	:	University District Hospital
Enrollment	:	2
Dates Offered	:	Academic Year
Meeting Place	:	2 nd . floor, UDH, Labor Room Conference Room
Telephone	:	(787) 754-0101 Ext, 2237
Meeting Time	:	8:00 AM
Night Duties	:	None
Evaluation	:	The student will be evaluated utilizing the same criteria as those Used for interns and residents, making the proper adjustments for the level of training.

MOBG 7027-8 Researching in Obstetrics and Gynecology – 160-240 hours; four to six full weeks. (V)
Prerequisite: Have completed and approved first year of Medicine.

The course will expose the student to active research in basic or clinical science. The first week will be dedicated to the preparation of the protocol, statistical analysis and report writing. The rest of the time will be assign to the research project being undergone under the supervision of a professor, stimulating his originality.

Person in Charge : Dr. Josefina Romaguera
Enrollment : By arrangement
Dates Offered : Throughout the year
Meeting Place : By arrangement
Meeting Time : By arrangement
Evaluation : Daily work, knowledge, skills and attitudes.

MOBG 7028-8 Women and Health: Social and Clinical Perspectives on Sexual and Reproductive Health in Puerto Rico; 80-240; two to six weeks. (V)
Prerequisite: Have completed and approved Medicine I

Through conferences, group discussions and independent study, the course is designed to disseminate information and subject-matter unknown to many about different aspects of women's sexual and reproductive health in Puerto Rico from a clinical and social perspectives. The course also seeks to acquaint students with specific health services realities in the mentioned areas and to encourage research on specific matters, giving students and opportunity to open up to new areas of involvement in the clinical and research fields.

Faculty in Charge : Yamila Azize Vargas, Ph. D.
 Yari Vale Moreno, MD
 Juan Carlos Jorge, Ph.D.
Enrollment : 15
Dates Offered : By arrangement
Telephone : 787-758-2525, ext. 2348
Meeting Place : By arrangement
Meeting Time : 8:00 AM - 12:00 PM
Evaluation : The student will be evaluated on the basis of:
 Participation in Class 20%
 Article Discussion 20%
 Critical Essay 30%
 Assistance 30%

OPHTHALMOLOGY

OPHTHALMOLOGY

MOFT 7010-1 Clinical Ophthalmology – 160 to 320 hours (V)
Prerequisite: Have completed and approved third year Internal Medicine and Pediatrics.

This course consists of clinical demonstrations on the various methods used to examine the eye and the presentation, at the outpatient clinics and hospital, of patients suffering from eye diseases. The student will be able to observe procedures and surgical techniques used at Operating Rooms and examine patients at Outpatient Department Clinics under faculty supervision.

Person in charge	:	Dr. Luis Serrano
Enrollment	:	4 students
Dates Offered	:	Academic Year
Hospital	:	University District Hospital
Meeting Place	:	9th floor, Dept. of Ophthalmology
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Daily work, attitudes and skills. The student will have two weeks rotation in the University Hospital and in the Ophthalmology Clinic at ASEM and two weeks at Veterans Hospital.

This same course is offered in the following hospital:

Course Number	:	MOFT 7010-4
Hospital	:	Veterans Administration
Person in charge	:	Carmen Henn, MD
Enrollment	:	2
Dates Offered	:	Academic Year
Meeting Place	:	Dr. Henn's Office
Meeting Time	:	7:00 AM
Night Duties	:	No
Evaluation	:	Daily work, skills and attitudes

Course Number	:	MOFT 7010-13
Hospital	:	University of Puerto Rico Hospital, Carolina
Telephone	:	757-1800 Ext. 438
Person in charge	:	Ana Mejías, MD
Enrollment	:	2
Dates Offered	:	Academic Year
Meeting Place	:	Lobby Hospital
Meeting Time	:	7:00 AM
Night Duties	:	No
Evaluation	:	Daily work, skills and attitudes

MOFT 7015-08 Ophthalmology Research - 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved first year of Medicine.

This course involves the participation of the student in one of the current research projects carried out at the Department of Ophthalmology, such as Epidemiology of Senile Cataracts, Lens Antibodies in Diabetes and Cataracts, Biochemistry of Lens pigments or Human Aqueous Humor Composition.

The student will receive basic instruction on scientific research methodology, will become familiar with the specific aspects of a particular project (objectives, rationale and significance, methodology, preliminary results) and will have a hands-on experience in some defined aspect of its development.

Hospital	:	UDH
Person in charge	:	Dr. Sixto García Castiñeiras
Enrollment	:	By arrangement, 1 student
Dates Offered	:	Throughout the year
Meeting Place	:	Ophthalmology Dept. Room, A-914
Meeting Time	:	By arrangement
Night Duties	:	No
Evaluation	:	Evaluation will be based in the following: 60% Study of clinical and laboratory records 30% Oral and written presentation 10% Bibliographical Research Final evaluation: A, B, C, F

MOFT 7995-8 Introduction to Medical Ethics - 80 - 160 hours (V)
Prerequisite: Have completed and approved Medicine I

This course will initiate the participant to the ethical theory of Principlism as formulated by Beauchamp and Childress. Principlism has been, for the last twenty years, the most often used ethical construct to explain, examine, justify and evaluate the physician-patient interaction through four principles: 1) Autonomy: the self determination of a competent patient; 2) Beneficence: The welfare of the of the patient as the primary concern; 3) Non maleficence: first do no harm; 4) Justice: the balance between benefits and burdens. These principles derived from the common morality, that is tradition and common sense, can lead the competent morally serious person to the right decision. Conferences, case presentations and discussions will be complemented by guest speakers. Self teaching modules in the form of take-home, multiple choice, and true or false tests will incline the students to read and review the subject matter without increasing the burden of an already challenging curriculum.

Person in charge	:	Dr. Raúl Pérez, Dr. Gloria Reyes (Co-Coordinator)
Enrollment	:	5 – 20
Dates Offered	:	Academic Year
Meeting Place	:	Medical Sciences Campus
Meeting Time	:	By arrangement (after 5:00pm Wednesdays)
Evaluation	:	Take home test and class participation, assistance. For 160 hours credit, student must complete a presentation on one of the discussed subjects to faculty members.

PATHOLOGY

PATHOLOGY

MPAT 7010-8 Basic Anatomic Pathology - 160 hours; four full time weeks. (F)
Prerequisite: Have completed and approved second year of Medicine.

The course will expose the students to the process of clinic pathologic correlations. During a period of four weeks the student will be exposed to gross and microscopic pathology. The student will perform one autopsy and will prepare its respective protocol and present it in the autopsy review conference.

Person in charge	:	Dra. Maria J. Marcos
Enrollment	:	2
Dates Offered	:	Throughout the year, by arrangement
Meeting Place	:	Pathology Department
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Performance during the rotation.

MPAT 7017-8 Transfusion Medicine – 80-160 hours; two to four full time weeks. (V)
Prerequisite: Have completed and approved Second Year Medicine.

Introduction to all aspects of Transfusion Medicine. Laboratory bench work will be provided in the Transfusion Service (ASEM), the Blood Bank of ASEM and the HLA Laboratory. Case presentation, rounds, and regular conferences will be held. Emphasis in the knowledge of immunohematology, blood collection, processing of blood and blood components, storage and shipment, aphaeresis, transfusion of blood and components, adverse effects of donor and recipient and the quality assurance program.

Person in charge	:	Dr. Román Vélez and Dr. Consuelo Climent
Enrollment	:	2
Dates Offered	:	Year Round
Meeting Place	:	Department of Pathology, 3rd. floor
Meeting Time	:	8:00 AM
Evaluation	:	Pre and post course examination.

MPAT 7019-8 Laboratory Medicine – 160 hours; four full time weeks. (F)
Prerequisite: have completed Second Year of Medicine

To introduce the students to the main aspects of Laboratory Medicine as a supplement of their pathology course and as aid during their clinical years.

Person in charge : María I. Santé, MD and Dr. Consuelo Climent
Enrollment : 2
Dates Offered : All periods except July and December 15 – January 14
Meeting Place : Pathology Department, Laboratory Medicine, 3rd floor School of Medicine
Evaluation : The standard evaluation form permits an objective evaluation of performance. Pre and post course examination.

MPAT 7025-8 The Ascent of Man - 80 - 220 hours (V)
Prerequisite: Have completed and approved Medicine I

The Ascent of Man covers, not in strict chronological order but according to the strongly evolutionary model suggested in the title, the emergence of humanity, the agricultural revolution, architecture and engineering, metallurgy and chemistry, mathematics, astronomy, Newtonian and relativistic mechanics, the industrial revolution, Darwinism, atomic physics, quantum physics, DNA and, neurobiology and cognitive science and artificial intelligence.

Person in charge : Dr. Angel Román Franco
Enrollment : By arrangement (10 students maximum)
Dates Offered : Academic Year
Meeting Place : Pathology Department
Meeting Time : By arrangement
Evaluation : Oral evaluation (25%) and course participation assessment including written assignment (25%) quality of participation in discussions, and or tutorials (50%) or equivalents.

MPAT 7995-8 Instructional and Evaluation Strategies in Pathology - 80 - 160 hours. (V)
Prerequisite: Have completed and approved Medicine I and II

This course is designed for third and fourth year medical students. It will allow the student to explore and develop teaching skills, including the preparation of educational materials, such as lectures using Power Point, offering laboratory exercises, leading small group discussions and/or tutorials during the Pathology course offered to second year medical students.

The course coordinator will supervise the development of the skills. The medical student will also learn how to write best answer questions and will study the characteristics that distinguish professors of excellence. The methodology to attain these objectives include lectures, independent study, group discussions and supervised practice.

Person in charge	:	Dra. Carmen González Keelan
Enrollment	:	1 - 3
Dates Offered	:	Throughout the year
Meeting Place	:	3rd. floor, A-394 / A-363
Meeting Time	:	8:00 AM to 4:00 PM
Evaluation	:	Conference 50%, Laboratory participation and tutorials for students of second year

MPAT 7996-08 Pediatric Pathology; 80-160 hours; two to four weeks. (V)
Prerequisite: Have completed and approved Medicine II

The course will expose the students to the process of clinicopathologic correlation in the field of Pediatric Pathology. During a period of four weeks, the student will be exposed to gross and microscopic examination of pediatric specimens and placentas. The student will also participate in the weekly Pediatric Treatment Planning Conference (TPC). The student will perform a pediatric autopsy and will be responsible for the autopsy protocol and clinicopathologic correlation. This case will be presented at the end of the rotation at the Autopsy Review Conference.

Person in charge	:	Dr. María S. Correa Rivas
Enrollment	:	1 - 2
Dates Offered	:	September to May
Meeting Place	:	Department of Pathology, Central Building (ASEM Basement)
Meeting Time	:	8:00 AM to 4:00 PM
Evaluation	:	Evaluation will be based on:
		-Assistance and Professional Attitude 30%
		-Punctuality 10%
		-Case Discussion 30%
		-Autopsy Presentation 30%

MPAT 7997-08 Medicine in Shakespeare; 144 hours (36 x 4 per literary character) –
192 hours (48x4 per literary character)

This course will explore The Tragedies of King Lear, Othello, Macbeth and Hamlet from a medical viewpoint. The plays will present men and women finding their identities or forge new ones while they struggle to balance obligations to family, society and self. The student will see and analyze their struggle with the outcome of choices made. Through this course, the student shall explore Shakespeare's dramatic art for conveying human foibles, fallibility and weaknesses well as his deep understanding of our humanity. Students will develop a clinical history of the play's main character.

Person in charge	:	Angel Román Franco, MD
Enrollment	:	10
Dates Offered	:	Throughout the year
Meeting Place	:	Department of Pathology, Meeting Room
Meeting Time	:	4:00 PM
Evaluation	:	Student will be evaluated using the SOM standard format evaluation form for elective courses. As a requirement, the evaluation must be discussed with students, who must also sign the form.

MPAT 7105 Darwinian Medicine ; 54-60 hours. (V)

Darwinian medicine is the application of modern evolutionary theory to human health and illness, lying at the crossroads between theoretical and applied with human biology, medical anthropology, psychology and physiology. It begins examining the overall concept of evolutionary medicine, advancing through a series of topics showing the scope of impact that evolutionary theory has on medicine today. A continuing theme will be the disparity between proximate and the ultimate causes, approached through an evolutionary interpretation. It will lay emphasis upon those situations and conditions of health (or illness) that necessitate both proximate and ultimate causality. It will address homosapiens as a microecosystem grounded on the complex interaction of genotype, phenotype, environment, and behavior that influence health and illness. It will also address recent re-evaluation of the biological locus of homosapiens, its evolvability and the current status of human evolution.

Person in charge	:	Angel Román Franco, MD
Enrollment	:	10
Dates Offered	:	Throughout the year
Meeting Place	:	Department of Pathology, Meeting Room
Meeting Time	:	4:00 PM
Evaluation	:	Grading system: Approved / Non Approved

PEDIATRICS

PEDIATRICS

MPED 7010-2 General Pediatrics – 80-240 hours; two to six full time weeks. (V)
Prerequisite: Have completed and approved third year Pediatric Clerkship.

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 and/or Pediatric Emergency Room.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

NOTE: This course will be credited with 160 hours as a Required Selective Jr for the UPR School of Medicine fourth year medical students

Person in charge	:	Dra. Belinda Beauchamp – belinda.beauchamp@upr.edu
Enrollment	:	5 students in Pediatric wards Students will be assigned to Team A, Team B or Team C. Students will rotate between wards
Evaluation	:	All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37
Dates Offered	:	Throughout the Year, except Holy week
Hospital	:	University Pediatric Hospital (UPH)
Meeting Place	:	UPH, conference room A
Meeting Time	:	7:30 AM
Night Duties	:	The purpose of night call is to provide patient care, assume clinical responsibility, and accumulate clinical experience including skill maintenance, under close resident and faculty supervision. Night and Weekend duties must be sufficient to permit implementation of the concept of continuity of patient care.

During the Rotation in the Pediatric Wards:

- Students will be assigned **three** (3) Short Call periods during the week (5:30 – 9:00pm)
- Students will be assigned **one** Saturday (12 hrs) sign in/sign out at 7:30 **pm** and sign out at 7:30 **am**
- Students will be assigned **one** Saturday, Sunday or Holidays “Short Call” period (12 hrs) sign in at 7:30 **am** and sign out at 7:30 **pm**

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. For students from the UPR School of Medicine, the Student Evaluation form will be use. Students from other schools may bring their evaluation or use our evaluation if it is accepted by their school.

This same course is offered in the following hospitals:

MPED 7010-3 General Pediatrics – 80-240 hrs. – two to six full time weeks (V)

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 and/or Pediatric Emergency Room.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, third floor San Juan City Hospital.

Course Number	:	MPED 7010-3
Hospital	:	San Juan City Hospital
Person in Charge	:	Dr. Inés Cuebas
Enrollment	:	2 students per month
Telephones	:	787-765-7618
Dates Offered	:	Throughout the year, except July, December, and Holy week
Meeting Place	:	SJCH, Pediatric Conference Room
Meeting Time	:	8:30 AM
Night Duties	:	The student will be responsible to attend all academic activities the day after and before the night duty.

During the Rotation in the Pediatric Wards:

- Students will be assigned **three** (3) Short Call periods during the week (5:30 – 9:00pm)
- Students will be assigned **one** Saturday (12 hrs) sign in/sign out at 7:30 **pm** and sign out at 7:30 **am**
- Students will be assigned **one** Saturday, Sunday or Holidays period (12 hrs) sign in at 7:30 **am** and sign out at 7:30 **pm**

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.

MPED 7010-13 General Pediatrics – 80-240 hours; two to four full time weeks. (V)
Prerequisite: Have completed and approved third level year Pediatrics Clerkship.

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 and/or Pediatric Emergency Room.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, 6th floor UPR Hospital.

Person in charge	:	Dr. Ileana Rivera
Alternate	:	Dr. Edith Calderón
Enrollment	:	2 students per month
Dates Offered	:	Throughout the Year, except December, and Holy week
Meeting Place	:	University of Puerto Rico Hospital, Carolina, 6 th floor, Department of Pediatrics
Meeting Time	:	8:00 AM
Night Duties	:	Monday to Friday 4:00 pm – 10:00 pm, Saturday, Sunday and Holyda's 8:00 am – 10:00 pm
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 attending and/or resident.

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Marta Valcárcel
Alternate	:	Dr. Inés García and Dr. Juan Rivera
Enrollment	:	2 per rotation
Dates Offered	:	Throughout the year, except Holy week
Hospital	:	UPH
Meeting Place	:	Neonatal Intensive Care Unit, 6 th floor, University Pediatric Hospital
Meeting Time	:	7:30 AM
Night Duties	:	No
Evaluation	:	Daily work.

MPED 7018-2 Introduction to Pediatric Cardiology – 80 - 160 hours, four full time weeks. (V) Prerequisite: Have completed third year Pediatric Clerkship.

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 invasive and non-invasive diagnostic tools such as echocardiography, ambulatory electrocardiography and stress tests.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Olga Joglar
Enrollment	:	1-2 per session by arrangement with person in charge
Dates Offered	:	Throughout the Year, except July, December and January, Holy Week
Hospital	:	University Pediatric Hospital
Meeting Place	:	University Pediatric Hospital 1A - 11
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Oral exam, case presentation and discussions

MPED 7019 Primary Pediatric Health Care - 80 - 480 hours, two to twelve full time weeks. (V) Prerequisite: Have completed third year Pediatric Clerkship

MPED 7019-1 Emergency Room (UPH)

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Milagros Martín de Pumarejo – milagros.martin8@upr.edu
Enrollment	:	2 students per two weeks in each rotation, 3 rd student by special arrangement only
Dates Offered	:	Throughout the Year, except Holy week
Hospital	:	University Pediatric Hospital
Meeting Place	:	Emergency Room - 1 st Floor University Pediatric Hospital
Meeting Time	:	7:30 am or 7:30 pm or 10:30 am or 10:30 pm
Night Duties	:	Shifting rotation: first week : 7:30 am - 7:30 pm second week : 7:30 pm - 7:30 am By special arrangements another shifting rotation could be offered: Shifting rotation first week : 10:30 am - 10:30 pm second week : 10:30 pm - 10:30 am
		If more than one student is enrolled in the rotation one will begin during the day and the other at night.
Evaluation	:	Performance, attitudes, quality of work ups and procedures

MPED 7019-2 Neuro Developmental Pediatrics (UPH)

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. María Noelia González Muñiz
Enrollment	:	2 students per two weeks in each rotation
Dates Offered	:	Throughout the Year (except July, December and Holy week)
Hospital	:	University Pediatric Hospital
Meeting Place	:	Neuro-Desarrollo 1 st Floor
Meeting Time	:	7:30 AM
Night Duties	:	No
Evaluation	:	Performance, attitudes, quality of work ups and procedures

MPED 7019-3 Nursery (Stabilization Neonatal Care Unit - UDH)
Prerequisite: Have completed third year Pediatric Clerkship

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).

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Maria Quintero
Enrollment	:	2 students per two weeks in each rotation
Dates Offered	:	Throughout the Year (except July, December by special arrangement and Holy week)
Hospital	:	University Hospital
Meeting Place	:	Nursery University District Hospital - 2 nd Floor
Meeting Time	:	7:30 AM
Night Duties	:	No
Evaluation	:	Performance, attitudes, quality of work-ups and procedures

MPED 7019-4 Emergency Room - San Juan City Hospital

The student will attend activities related to the evaluation of children and adolescents at the Emergency Room and to all the academic activities of the Department of Pediatrics including the morning reports, conferences, and PBL discussion. The student will acquire knowledge and skills in the diagnosis, evaluation and management of the most common acute pediatric and surgical conditions.

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, etc.

Educational activities at the Emergency Room will include daily rounds in the observation area, evaluation and discussion of the walk-in patient, and review and discussion of the children presenting critically-ill.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, third floor San Juan City Hospital

Person in charge	:	Dr. Muguetta Isona
Enrollment	:	1 student per two weeks in each rotation
Dates Offered	:	Throughout the Year (except July, December and Holy week)
Hospital	:	San Juan City Hospital
Meeting Place	:	Department of Pediatrics-Conference Room (3 rd Floor), after morning report present to Emergency Room (1 st Floor)
Meeting Time	:	7:30 AM at Morning Report 3 rd Floor Conference Room 8:00 AM at Emergency Room (1 st Floor) if no Morning Report on schedule
Night Duties	:	No
Evaluation	:	Performance, attitudes and professionalism, quality of work-ups and procedures

MPED 7019-5 Diabetes Summer Camp – 80 – 480 hours, two to twelve full time weeks (V)
Prerequisite: Have completed first year medical school

The student will participate in a diabetes camp where he/she will learn how to care for children with diabetes mellitus at an outdoor facility. He/she will be able to learn insulin adjustments during camp identify hypoglycemia at a camp set up and its proper handling. Also he/she will acquire skills for proper utilization of several types of self-blood glucose monitoring devices, identify and manage diabetic ketoacidosis in a non-hospital set up, understand exchange list and handle its adjustments properly to prevent from hypoglycemia.

Person in charge : Dr. Miriam N. Alicea, Medical Director CEBNAD
Tel. 787-850-7950, 787-380-9567
E-mail: mnalicea2@gmail.com

Enrollment : 2-4 students per two weeks in each rotation

Dates Offered : Offered only from July 6-24, 2015
July 6-10, 2015 = niños 8-11 años
July 13 - 17, 2015 = adolescentes 12-14 años
July 20 - 24, 2015 = jóvenes de 15-17 años

Meeting Place : Casa Cristo Redentor, Aguas Buenas

Meeting Time : As instructed

Night Duties : It is required that the student will stay at the camp for its duration

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

Additional requirement : (must be obtained by students as soon as possible)

1. Camp staff application accompanied by:
 - a. 2 X 2 photo
 - b. Medical Insurance Card (legible copy)
 - c. Police certificate (dated after February 1)
 - i. Good conduct (copy)
 - ii. Certificate that there is no evidence of being on sexual offenders registry (requires original conduct certificate)
 - d. Department of family affairs
 - i. Authorization to investigate background
 - ii. Certificate that there is no evidence of being on the Child Abuse Registry
 - e. Health Certificate: If done by private doctor or supplied at Medical School it must be sent with original lab results: VDRL, PPD or Chest Xray. Must be dated after August of previous year.
 - f. Evidence of completing High School (copy of Medical School ID card or registration, copy of University Diploma)
 - g. Evidence of CPR course or First Aid Course (with certification or card)
2. Attend orientation meetings prior to camp is compulsory
3. Staff should arrive 2 days prior to start camp

Application deadline: April 13, 2015
Application available at cebnad.org

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Maritza Salcedo
Enrollment	:	1 student for 2 weeks
Dates Offered	:	August – May, by personal arrangement only except Holy week
Hospital	:	University Pediatric Hospital; Center for Hispanic Youth Violence Prevention
Meeting Place	:	Office BA-14, Basement Hospital
Meeting Time	:	8:30 AM
Night Duties	:	Not required
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.

MPED 7020-2 Pediatric Endocrinology – 160-320 hours; four to eight full time weeks (V)
Prerequisite: Have completed third year Pediatric Clerkship.

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Francisco Nieves
Enrollment	:	1
Dates Offered	:	Throughout the Year, except December, January and Holy week
Hospital	:	Pediatric University Hospital
Meeting Place	:	Pediatric Endocrinology Section, Second Floor, HOPU
Meeting Time	:	7:30 AM
Night Duties	:	No
Evaluation	:	Oral and/or written exam. The course includes also literature research, topic discussions, Journal Club participation and a short project.

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. María del C. González – maria.gonzalez39@upr.edu
Alternate	:	Dr. Julia Malavet – julia.malvet@upr.edu
Enrollment	:	3
Dates Offered	:	August to November and February to June except Holy week
Hospital	:	University Pediatric Hospital
Meeting Place	:	Medical Genetic Section Office/4 th floor south, HOPU
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Written and oral exams, literature searches and preparation of reports on specific clinical genetic problems or cases.

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Marta Suarez – marta.suarez@upr.edu
Alternate	:	Dr. Melvin Bonilla and Dr. Nilka de Jesus
Enrollment	:	1 - 2
Dates Offered	:	Continuously throughout the year, except July, December, January and Holy week
Meeting Place	:	University Pediatric Hospital, Pediatric Renal Center, 3 rd floor south
Meeting Time	:	8:00 A.M.
Night Duties	:	No
Evaluation	:	Student will be evaluated by his attitudes and knowledge demonstrated during the daily rounds in Ambulatory Clinics and case discussions.

MPED 7028-2 Clinical Pediatric Neurology – 80 - 160 hours; (160 hours recommended);
two - four full time weeks (V) at University Pediatric Hospital (HOPU)
Prerequisite: Have completed third year Pediatric Clerkship

The student will get acquainted with the most common clinical entities 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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in Charge	:	Dr. Marisel Vázquez, Dra. María Dávila
Alternate	:	Dr. Jessica Gonzalez Montes, Dr. Jocelyn Montalvo
Enrollment	:	1-2 students
Dates Offered	:	Throughout the year, except July and December and Holy week
Meeting Place	:	University Pediatric Hospital, 5 th floor south, Pediatric neurology conference room. For your first day coordinate the meeting place with the pediatric neurology chief resident, Dr. Mireya Bolo 787-413-4023
Meeting Time	:	8:00 AM
Telephone	:	Dr. Mireya Bolo 787-413-4023 (call Dr. Bolo or send a text message)
Evaluation	:	The student will be evaluated by means of formative examination (completed at home), observation during the performance of the neurologic exam, participation in rounds and clinics, and other tools described in the course syllabus (page 9-11)

In addition to the above description the student will also participate in the evaluation of patients in different settings:

1. Evaluation of hospitalized patients with neurological at UPH and in the Pediatric Ward of San Juan City Hospital.
2. Participation of the Pediatric Epilepsy Clinics (4 hrs. per week): 3rd floor, Continuity Clinic Area, UPH 8:00 am.
3. Participation in Pediatric Neurology Continuity Clinics (4 hours per weeks) Medical Science Campus clinics – Reparto Metropolitano Shopping Center, Clinic Area, 2nd floor.

END OF ROTATION EVALUATION

For adequate feedback and improvement plan is required that the rotating student complete a confidential:

1. Faculty evaluation
2. Rotation evaluation

marisel.vazquez1@upr.edu Private office: 787-728-7775
mariae_davila@yahoo.com
gonzalezmontesmd@gmail.com
jocelyn_montalvo@hotmail.com
mireyabolo@gmail.com Cel.: 787-413-4023

MPED 7030-2 Pediatric Hematology – 80 - 160 hours, two to four full weeks (V)
 Prerequisite: Have completed and approved third year Pediatric and Internal Medicine clerkships.

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37 and Department of Pediatrics, third floor San Juan City Hospital

Person in charge	:	Dr. Enid Rivera
E-mail	:	enid.rivera6@upr.edu
Alternate	:	Dr. Leslie Soto
Enrollment	:	1
Dates Offered	:	All academic year, except Holy week
Hospital	:	University Pediatric Hospital (UPH)
Meeting Place	:	2 nd floor, Torre Nueva, HOPU
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Evaluation Form

Course Number	:	MPED 7030-3
Hospital	:	San Juan City Hospital
Person in Charge	:	Dr. Iván Perez
Enrollment	:	1
Dates Offered	:	Monthly, except January July and December
Meeting Place	:	Hematology Section
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Written exams and a Theme Case Presentation

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.

MPED 7036-2 Pediatric Intensive Care – 80 - 160 hours; two-four full time weeks (V)
Prerequisite: Have completed third year Pediatric Clerkship.

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dra. Alicia Fernández Seín – alicia.fernandez@upr.edu
Alternate	:	Dr. Ricardo García
Enrollment	:	2
Dates Offered	:	All year except Holy week
Hospital	:	University Pediatric Hospital
Meeting Place	:	Pediatric Intensive Care Unit, 1st. floor
Meeting Time	:	7:30 AM
Night Duties	:	No, every 5 th night student will leave at 7:30 pm (12 hrs shift)
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.

MPED 7045-2 Pediatric Oncology – 80 - 160 hours (V)
 Prerequisite: Have completed and approved Internal Medicine and Pediatrics third year clerkships.

The student will become a member of the team in the Oncology Program. He/she actively participates in all of the activities held at Oncology Ward and Clinics. He/she will make an in depth study of a clinical case, performing a review of literature pertinent to the case, under direct supervision of one of the members of the medical team.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Gloria Colón
Alternate	:	Dra. Maria Echevarria
Enrollment	:	2
Dates Offered	:	All academic year except December and Holy week
Hospital	:	University Pediatric Hospital
Meeting Place	:	Oncology Clinic at the University Pediatric Hospital, second floor, above the emergency room
Meeting Time	:	9:00 A.M. on scheduled day of training, first day must attend morning report at 7:30 am at Room A – University Hospital
Night Duties	:	No
Evaluation	:	Theme Case Presentation

MPED 7046-3 Developmental Pediatrics – 80 - 160 hours (V)
 Prerequisite: Have completed and approved third year Pediatric Clerkship.

Comprehensive assessment of the child with developmental disorders, with emphasis on early identification, therapy and management of children with mental disorders, motor, delay, cerebral palsy language, hearing and behavior disorders.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, third floor San Juan City Hospital

Person in charge	:	Dr. Gisela Negrín, Director Neurodevelopment section
Enrollment	:	1
Dates offered	:	By arrangement with Dr. Negrín
Duration	:	Minimum of 2 weeks (1 month) rotation
Meeting Place	:	3 th floor - San Juan City Hospital, Pediatric Department
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	The student will be evaluated on the basis of knowledge, skills and attitudes developed during the course.

MPED 7105-2 Research in Pediatrics - 160 - 320 hours (V)
Prerequisite: Have completed and approved Medicine I

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.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	Dr. Clemente Díaz
Enrollment	:	By arrangement
Dates offered	:	Throughout the year
Meeting Place	:	By arrangement with course coordinator
Meeting Time	:	8:00 AM
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%

MPED 7106-2 Research on History of Health - 160 - 320 hours (V)
Pre-requisite: Have completed and approved Medicine I

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.

Student will select an investigation project according to data available to analyze, his/her knowledge of history, and duration of the course.

All students must sign the attendance sheet each morning, available at the Department of Pediatrics, first floor University Pediatric Hospital Office 1A-37

Person in charge	:	José G. Rigau Pérez, M.D.
Enrollment	:	2 students max.
Dates offered	:	By arrangement only
Meeting Place	:	Pediatric Department (to start, then by arrangement)
Meeting Time	:	By arrangement
Night Duties	:	No
Evaluation	:	Discussion - 25%
		Oral Presentation - 25%
		Written Report - 50%

**PHYSICAL MEDICINE,
REHABILITATION
AND
SPORTS MEDICINE**

**DEPARTMENT OF PHYSICAL MEDICINE,
REHABILITATION AND SPORTS MEDICINE**

MCIR 7027-1 Introduction to Clinical Physiatry - 80 - 160 hours; two to four full time weeks (V)
Prerequisite: Have completed and approved third year Internal Medicine, Pediatric, Surgery and Radiology courses.

The student will be exposed to the clinical aspects of Physical/Rehabilitation Medicine. He/she will be able to take medical histories, perform physical examinations to patients, under supervision by a faculty member or a resident. He/she will participate in all academic activities held by the Section and will be exposed to those electro diagnostic principles and treatments in acute and chronic Physical and Rehabilitation Medicine, Sport Medicine, Exercise Physiology, Pediatric Rehabilitation and Cardiac Rehabilitation.

Person in charge	:	Dr. Carmen E. López
Enrollment	:	6
Dates Offered	:	Academic year, except June, July and January
Hospital	:	UDH
Meeting Place	:	Physical Medicine and Rehabilitation Center, First Floor, UDH
Meeting Time	:	8:00 AM
Evaluation	:	(1) Attendance participation in clinics, attitude, knowledge, skills. (2) Written essay, presentation and discussion with Staff at the end of the course.

This same course is offered at the following hospital:

Course Number	:	MCIR 7027-4
Hospital	:	VAH
Person in charge	:	Dr. Ana Cintrón
Enrollment	:	By arrangement (2 or 3 students)
Fax	:	787-641-5716
Dates Offered	:	Throughout the Year
Meeting Place	:	Rehabilitation Medicine Services #117
Meeting Time	:	8:00 AM
Evaluation	:	(1) Attendance participation in clinics, attitude, knowledge, skills. (2) Written essay, presentation and discussion with Staff at the end of the course.

Course Number	:	MCIR 7027-13
Hospital	:	Carolina
Person in charge	:	Dr. Carmen López/Dr. Miguel Berríos
Enrollment	:	1
Dates Offered	:	Throughout the Year
Meeting Place	:	Basement - University of Puerto Rico Hospital, Carolina
Meeting Time	:	8:00 AM
Evaluation	:	(1) Attendance participation in clinics, attitude, knowledge, skills. (2) Written essay, presentation and discussion with Staff at the end of the course.

MCIR 7036-8 Topics in Sports Health and Exercise Sciences - 80-160 hours; two to four weeks (V).
Prerequisite: Have completed and approved third year Internal Medicine, Pediatrics and Surgery.

This is an elective course designed to present and discuss the interdisciplinary nature of this field. The students will have the opportunity to participate in the clinical, educational and research activities in the following areas: primary care services, sports traumatology and rehabilitation, biostatistics and computing, exercise physiology and biosychosocial services. An interdisciplinary faculty will advise students in their interventions.

Course by Arrangements

Person in Charge	:	Dr. William Micheo
Enrollment	:	2 maximum
Dates Offered	:	Throughout the year except July and December
Telephone/Fax	:	(787) 824-2669
Night Duties	:	No
Meeting Place	:	Second Floor, Medical Sciences Campus and Center for Sports Health and Exercise Sciences and/or, Albergue Olímpico, Salinas, P.R.
Meeting Time	:	8:00 AM
Evaluation participation	:	The student will be evaluated on basis of attendance, participation In activities, knowledge, skills attitudes and a lecture given at the end of the course.

MCIR 7045-8 Inpatient Rehabilitation Clinical Rotation – 80-160 hours (V)
Prerequisite: Have completed and approved third year courses (MTER 7325, MTER 7316, MTER 7326)

This course aims to expose medical students to the medical care of hospitalized patients with acute acquired disabilities such as: patients with stroke, spinal cord injuries, orthopedic injuries, neurological and traumatic brain injuries. This rotation will give the student the opportunity to recognize and manage these medical issues. Also this rotation will give the student the opportunity to be an integral part of a multidisciplinary team.

Person in charge	:	Dr. Eduardo Ramos
Enrollment	:	2
Meeting Time	:	7:30 AM to the admission morning report
Meeting Place	:	Classroom with audiovisual facilities for Power Point and DVD's projections
Evaluation	:	Grading System

PHYSIOLOGY

PHYSIOLOGY

MFIS 7015-8 Methods in Neurobiology Research – 80-160 hours in June and July (V)
Prerequisite: Have completed and approved first year of Medicine

This course is intended to acquaint the student with the different techniques used in research in neurobiology. The techniques include electrophysiological recording, immunohistochemistry and tissue culture. The student will observe the techniques in use in the laboratory and will learn their application to various experimental problems. The course will include independent study.

Person in charge	:	Dr. Carlos Jiménez, Department of Physiology
Registration	:	Requires approval by the Departmental Chairman or the Coordinator for Graduate Studies of the Department.
Enrollment	:	1 – 3 students
Dates Offered	:	By arrangement during the summer
Meeting Place	:	Department of Physiology, RCM
Evaluation	:	Student performance skills, knowledge and other activities.

MFIS 7018-8 Research in Physiology I - 80-320 hours in June and July (V)
Prerequisite: Have completed and approved first year of Medicine.

This course offers the opportunity to participate in an ongoing research program in Physiology. The student will have hands-on experience in the laboratory and will be involved in different aspects of research, including development of protocols, experimentation, laboratory analyses, data handling, statistical analysis and literature review. The possible research areas include: membrane and cellular physiology, cardiovascular physiology, neurophysiology, physiological genomics (aging), neuroendocrine physiology, airway physiology, and spinal cord injury.

Person in charge	:	Dr. Jorge David Miranda, Department of Physiology
Registration	:	Requires approval by Departmental Chairman or the Coordinator for Graduate Studies of the Department.
Enrollment	:	1 – 3 students
Dates Offered	:	By arrangement during the summer
Meeting Place	:	Department of Physiology, RCM
Evaluation	:	Student performance, knowledge and other activities.

PSYCHIATRY

PSYCHIATRY

All students interested and/or enrolled in a psychiatry elective must coordinate with Dr. Vilma McCarthy, at least four (4) weeks prior to the date that the elective starts. The purpose is to guarantee the proper coordination with the clinical settings and proctors to enhance the learning experience. It is strongly encouraged that students enroll in each elective as early as possible.

MPSI 7010-13 Psychiatric Junior Internship – 80-240 hours, two to six full time weeks (V)
Prerequisite: Have completed and approved third year rotations as required by specific track.

NOTE: This course will be credited with 160 hours as a Required Selective Jr for the UPR School of Medicine fourth year medical students

The student will participate in the complete workup of patients and their families. He/she will be assigned to current activities and seminars offered to psychiatric residents while in this rotation. The rotation includes participation in group therapies.

Course Number	:	MPSI 7010-13
Person in charge	:	Dr. Diana Díaz
Enrollment	:	2*
Dates Offered	:	Throughout the year
Telephone	:	(787) 750-3022, (787) 757-1800 X358, (787) 757-2967 Fax: (787) 757-2988
Hospital	:	University of Puerto Rico Hospital, Carolina
Meeting Place	:	Psychiatry Unit, 1 st Floor, UPR Hospital, Carolina
Meeting Time	:	7:30 AM - 5:00 PM
Night Duties	:	Yes, one weekly until midnight (3 on weekdays 5pm – 12mn; 1 on weekend 8am – 12mn)
Evaluation	:	The student will be evaluated in knowledge, skills, and attitudes through their clinical performance. Also written exam or its equivalent. The clerkship will include continuity of services beginning at primary care.

***Of the 2 spaces available one (1) is reserved for UPR school of Medicine Students, if no UPR student is enrolled in the elective 1 week prior to starting it will be made available to all eligible students.**

The same course is offered in the following hospitals:

Course Number	:	MPSI 7010-2
Person in charge	:	Dr. Gloria Suau
Enrollment	:	1-2*
Dates Offered	:	Throughout the year
Telephone	:	(787) 522-8280
Meeting Place	:	Clínica Escuela Medicina, Reparto Metropolitano
Meeting Time	:	8:00 AM - 5:00 PM
Night Duties	:	Yes, one weekly until midnight. (3 on weekdays 5 pm – 12 m; 1 on weekend 8 am – 12 m) To be done at UPR Hospital Carolina
Evaluation	:	The student will be evaluated in knowledge, skills, and attitudes through their clinical performance. Students will be responsible for an oral presentation and a competence examination for final evaluation. The clerkship will include continuity of varied services.

***Maximum of number of students rotating in MPSI 7010-2 and 7015-2 is two, in any given combination.**

***Of the 2 spaces available one (1) is reserved for UPR school of Medicine Students, if no UPR student is enrolled in the elective 1 week prior to starting it will be made available to all eligible students.**

Course Number	:	MPSI 7010-4
Person in charge	:	Dr. Ana Torres / Dr. Gloria Zayas, Dr. Rebecca Fantauzzi
Enrollment	:	2 maximum at given time; one (1) student per medical school**
Dates Offered	:	Throughout the year
Telephone	:	(787) 641-7582 Ext. 12352
Hospital	:	Department of Veterans Affairs, San Juan, PR
Meeting Place	:	Psychiatry Services
Meeting Time	:	7:30 AM
Night Duties	:	Yes, one weekly until midnight (3 on weekdays 5 pm – 12 mn; 1 on weekend 8 am – 12 mn)
Evaluation	:	The student will be evaluated in knowledge, skills, and attitudes through their clinical performance. Also written exam or its equivalent.

****If no other student is interested in the elective, second student from same medical school may possibly enroll.**

Students may bring copy from the Students Health Services Office.

Course Number	:	MPSI 7010-20
Person in charge	:	Dra. Arlene Martínez
Enrollment	:	2 maximun at given time
Dates Offered	:	By arrangement
Telephone	:	(787) 739-5555, ext. 440 (Adianette Méndez)
		FAX (787) 434-0498
Hospital	:	First Hospital Panamericano, Cidra
Meeting Place	:	Dr. Santiago's Office
Meeting Time	:	8:00 AM
Night Duties	:	Yes, one weekly until midnight. (3 on weekdays 5 pm – 12 m; 1 On weekend 8 am - 12 m). Weekday calls done at FHP; weekend call done at UPR Hospital Carolina
Evaluation	:	The student will be evaluated in knowledge, skills, and attitudes through their clinical performance. Also written exam or its equivalent.

MPSI 7015-02 Comprehensive Child Psychiatry – 160-240 hours; four to six full time weeks (V)
Prerequisite: Have completed and approved third year rotations as required by specific track.

The student will participate in the evaluation and management of children and adolescents. He/she will participate in all the daily activities scheduled. Readings will be assigned. The research component is also available.

Person in charge	:	Dr. Gloria Suau
Enrollment	:	1-2*
Dates Offered	:	Throughout the Year
Telephone	:	(787) 522-8280
Meeting Place	:	Clínica Escuela de Medicina, Reparto Metropolitano
Meeting Time	:	8:00 AM - 5:00 PM
Night Duties	:	No
Evaluation	:	Written objectives. Also evaluation of clinical work and oral presentation and a competence skills exam. The rotation will include continuity of varied services.

***Maximum of number of students rotating in MPSI 7010-2 and 7015-2 is two, in any given combination**

***Of the 2 spaces available one (1) is reserved for UPR School of Medicine Students, if no UPR student is enrolled in the elective 1 week prior to starting it will be made available to all eligible students**

MPSI 7018-13 Alcohol Dependence – 80 - 160 hours, two full time weeks (V)
Prerequisite: Have completed and approved third year Psychiatric
Rotation

This course is designed to familiarize the student with the etiology, diagnosis and treatment of drug dependency.

Person in charge : Dr. Diana Díaz
Enrollment : 1-2*
Dates Offered : Throughout the Year
Telephone : (787) 750-3022
Hospital : University of Puerto Rico Hospital, Carolina
Meeting Place : Psychiatry Unit, 1st Floor, UPR Hospital, Carolina
Meeting Time : 7:30 AM - 5:00 PM
Night Duties : No
Evaluation : Pre and post test, mid-term, self evaluation.

***Of the 2 spaces available one (1) is reserved for UPR School of Medicine Students, if no UPR student is enrolled in the elective 1 week prior to stating it will be made available to all eligible students.**

The same course is offered in the following hospital:

Course Number : MPSI 7018-04
Person in charge : Dr. Ana Torres / Dr. Néstor Galarza
Enrollment : 1-2*
Dates Offered : Throughout the Year
Telephone : (787) 641-7582 Ext. 12352
Hospital : Department of Veterans Affairs, San Juan, PR
Meeting Place : Psychiatry Services
Meeting Time : 7:30 AM
Night Duties : No
Evaluation : Pre and post test, mid-term, self evaluation.

***If no other student is interested in the elective, second student from same medical school may possible enroll**

MPSI 7019-13 Introduction to Drug Dependence – 80-240 hours, two to six full time Weeks (V)
 Prerequisite: Have completed and approved third year Psychiatric Rotation

The student will be exposed to the technique of evaluating and managing patients with dependency and addiction to substances.

Person in charge : Dr. Diana Díaz and Staff
 Enrollment : 1-2*
 Dates Offered : Throughout the year
 Telephone : (787) 750-3022
 Hospital : University of Puerto Rico Hospital, Carolina
 Meeting Place : Psychiatry Unit, 1st Floor, UPR Hospital, Carolina
 Meeting Time : 7:30 AM - 5:00 PM
 Night Duties : No
 Evaluation : Pre-post test self evaluation

***Of the 2 spaces available one (1) is reserved for UPR School of Medicine Students, if no UPR student is enrolled in the elective 1 week prior to starting it will be made available to all eligible students.**

The same course is offered in the following hospital:

Course Number : MPSI 7019-04
 Person in charge : Dr. Ana Torres / Dr. Rosa Vargas
 Enrollment : 1
 Dates Offered : Throughout the year
 Telephone : (787) 641-7582 Ext. 12352
 Hospital : Department of Veterans Affairs, San Juan, PR
 Meeting Place : Psychiatry Services
 Meeting Time : 7:30 AM
 Night Duties : No
 Evaluation : Pre-post test self evaluation

MPSI 7025-8 Psychiatric Research - 160 hours, four full time weeks (F)
Prerequisite: Have completed and approved first year of Medicine.

Students in this course will be familiarized with the basic skills in psychiatric research. Emphasis will be placed the development of a short term research project preferably, clinically oriented.

Person in charge	:	Dr. Gloria González and Staff
Enrollment	:	2
Dates Offered	:	Throughout the year
Telephone	:	(787) 758-2525 Ext. 2228
Meeting Place	:	Department of Psychiatry
Meeting Time	:	7:30 AM - 4:30 PM - Friday 1:00 - 4:00 PM
Night Duties	:	No
Evaluation	:	Research report and Literature Review

MPSI 7026-13 Psychiatric Emergencies – 80-160 hours; two full time weeks(V)
Prerequisite: Have completed third year Psychiatric Rotation

This course offers the student the opportunity to evaluate patients suffering a psychiatric emergency, as well as to initiate prompt and intermediate therapies.

Person in charge	:	Dr. Diana Díaz and Staff
Enrollment	:	1-2*
Dates Offered	:	Throughout the year until early April
Telephone	:	(787) 750-3022
Hospital	:	University of Puerto Rico Hospital, Carolina
Meeting Place	:	Psychiatry Unit, 1 st Floor, UPR Hospital, Carolina
Meeting Time	:	8:30 AM - 5:00 PM
Night Duties	:	No
Evaluation	:	Summative test or its equivalent and clinical performance.

***Of the 2 spaces available one (1) is reserved for UPR School of Medicine Students, if no UPR student enrolled in the elective 1 week prior to starting it will be made available to all eligible students.**

The same course is offered in the following hospital:

Course Number	:	MPSI 7026-04
Person in charge	:	Dr. Ana Torres / Dr. Gloria Zayas
Enrollment	:	1-2*; if 2, (1) student per medical school
Dates Offered	:	Throughout the year
Hospital	:	Veterans Affairs, San Juan, PR
Meeting Place	:	Psychiatry Services
Meeting Time	:	7:30 AM
Telephones	:	787-641-7582, ext. 12352
Night Duties	:	No
Evaluation	:	Summative test or its equivalent and clinical performance.

***If no other student is interested in the elective, second student from same medical school may possible enroll**

PUBLIC HEALTH

PUBLIC HEALTH

SALP 6587-8

Clinical Management of Sexually Transmitted Diseases

Two weeks – 80 hours (F)

Prerequisite: Have completed and approved third year of Internal Medicine.

This course designed to discuss the clinical management of the most common sexually transmitted diseases, including HIV, and Chronic Hepatitis C.

The student will also understand the epidemiology and control of these conditions in Puerto Rico.

The students will learn to obtain a medical history, improve physical examination skills, sample taking, laboratory skills and pharmacological management of the diseases.

The material is covered through lectures, demonstration and clinical work with patients. Bibliographic material covering the topics discussed in the course is given free of charge to the students.

Person in charge	:	Dr. Hermes García, CLETS Medical Services Director
Enrollment	:	2 - 4 (every two weeks)
Dates Offered	:	By arrangement
Telephone	:	754-8127
Meeting Place	:	Latin American Center for Sexually Transmitted Diseases First Floor Casa Salud - Tel. 754-8128
Meeting Time	:	8:00 AM - 4:30 PM
Evaluation	:	Oral and written exams, case discussion.

RADIOLOGICAL SCIENCES

RADIOLOGY

MRAD 7015-10 Clinical Diagnostic Radiology – 80-160 two to four hours (V)
Prerequisite: Have completed and approved third year Radiology Course.

This is an elective course with emphasis on film interpretation with individualized tutorships. The student will participate in all radiographic procedures held at department. He/she will analyze X-rays films, will discuss the diagnosis, techniques and indications with his/her proctor. He/she will attend to interdepartmental conferences in which the Radiology Department is involved. He/she will also participate at the combined lectures with the Radiology residents.

Center	:	Radiology Central Office
Person in charge	:	Dr. Luis García and Dr. Gladys Perez Kraft
Enrollment	:	2 students every two weeks
Meeting Place	:	Radiology Department, Office A-811, 8 th . Floor Medical Sciences Campus
Phone	:	787 758-2525, exts. 1199, 2482
Meeting Time	:	8:00 AM
Evaluation	:	The student will be evaluated on the basis of knowledge, Judgment and attitudes developed during the course. At the end of the elective, the student prepares a written and oral case presentation.

This is an elective course with emphasis on film interpretation with individualized tutorships. The student will participate in all radiographic procedures held at department. He/she will analyze X-rays films, will discuss the diagnosis, techniques and indications with his/her proctor. He/she will attend to interdepartmental conferences in which the Radiology Department is involved.

Course Number	:	MRAD 7015-13
Center	:	Carolina Area Hospital Dr. Federico Trilla
Person in charge	:	Dr. Enrique Padro
Date Offered	:	Throughout the Year
Phone	:	787 757-1800, ext 763
Enrollment	:	1 students every two weeks
Meeting Place	:	Radiology Service, Carolina Area Hospital
Meeting Time	:	8:00 AM
Evaluation	:	The student will be evaluated on the basis of knowledge, judgments and attitudes developed during the course. At the end of the elective, the student will prepare a written and oral case presentation.

MRAD 7017-10 Introduction to Clinical Practice of Nuclear Medicine – 80-160 hours, two to four full time weeks (V)

Prerequisite: Have completed and approved Second year of Medicine.

It aims to familiarize the student with the principles and techniques in nuclear medicine and its application in the clinical practice of medicine. The student will be assigned to the Nuclear Medicine laboratory and clinics and will participate in all the activities held.

Center	:	Nuclear Center
Person in charge	:	Dr. Frieda Silva
Enrollment	:	2 students every two weeks
Offered	:	Throughout the year
Meeting Place	:	Oncology Hospital, 4 floor, Phone: (787)-625-9958
Meeting Time	:	8:00 AM
Evaluation	:	The student will be evaluated by sponsor on the basis of knowledge, skills and attitudes developed during the course.

Course	:	MRAD 7017-04
Center	:	VAH
Person in charge	:	Dr. Bartolo Santiago
Enrollment	:	2 students every two weeks
Offered	:	Throughout the year
Meeting Place	:	Nuclear Medicine, VAH, Basement
Meeting Time	:	8:00 AM
Evaluation	:	The student will be evaluated by sponsor on the basis of knowledge, skills and attitudes developed during the course.

SURGERY

SURGERY

MCIR 7010-1 General Surgery Sub Internship: 80 to 240 hours; four to six full time weeks (V)
Prerequisite: Have completed third year Internal Medicine and Surgery.

NOTE: This course will be credited with 160 hours as a Required Selective Jr for the UPR School of Medicine fourth year medical students

The fourth year surgery clerkship has duration of 4 to 6 weeks. This course aims to familiarize the fourth year medical student with the practice of General Clinical Surgery. He/she will work in one of the four departmental services. The student will be assigned no more than four patients per week, so as to take a medical history and perform a physical examination within the first 24 hours following admission. The student will be exposed to the pre, intra, and post-operative management of surgical patients. The student is expected to have a comprehensive overview of the core general surgery areas, with emphasis on the clinical knowledge that every surgeon should acquire. The surgery clerkship is designed to integrate clinical experiences with the planned surgical residency didactic activities. The **attendance** to all didactic and clinical activities is **mandatory**.

Person in charge	:	Manuel Mas Ramírez, MD
Enrollment	:	4
Dates Offered	:	Throughout the Year
Hospital	:	University Hospital
Telephone	:	(787) 758-2525 Ext. 1902
Meeting Place	:	University Hospital third floor Surgery ward at the Surgery resident's workroom
Meeting Time	:	6:30 am
Night Duties	:	Yes, every 4th night
Evaluation	:	Final clinical evaluation through discussion of some of the Cases seen by students during the course with a faculty member.

The fourth year surgery clerkship has duration of 4 to 6 weeks. This course aims to familiarize the fourth year medical student with the practice of General Clinical Surgery. He/she will work in one of the four departmental services. The student will be assigned no more than four patients per week, so as to take a medical history and perform a physical examination within the first 24 hours following admission. The student will be exposed to the pre, intra, and post-operative management of surgical patients. The student is expected to have a comprehensive overview of the core general surgery areas, with emphasis on the clinical knowledge that every surgeon should acquire. The surgery clerkship is designed to integrate clinical experiences with the planned surgical residency and trauma services (Wednesdays). The **attendance** to all didactic and clinical activities is **mandatory**.

This same course is offered in the following hospitals:

Course Number	:	MCIR 7010-4
Hospital	:	Veterans Administration Hospital
Person in charge	:	Dr. Carlos Ramírez Tánchez
Enrollment	:	4
Dates Offered	:	Throughout the Year
Meeting Place	:	Surgical Intensive Care Unit, 8th floor.
Meeting Time	:	6:30 AM
Evaluation	:	Oral exam. Also daily performance and through activities with the VA Surgical Staff.

Prerequisite: Have completed and approved Internal Medicine and Surgery

NOTE: This course will be credited with 160 hours as a Required Selective Jr for the UPR School of Medicine fourth year medical students

The fourth year trauma surgery clerkship has a duration of 4 weeks(160 hrs). The student will be a member of the Trauma and Critical Care Surgery Service. He/she will spend a week in the ER with the day team, a week at the ER with the night team, and two weeks in the Trauma Intensive Care Unit. The student will be exposed to the initial assessment and subsequent management of the polytraumatized patient. The student will be exposed to the pre, intra, and post-operative management of trauma surgical patients. If the patient is severely injured and requires intensive care unit management the student will be involved in the overall management of this critically ill patient.

The surgery clerkship is designed to integrate clinical experiences with the planned surgical residency (Thursdays) and trauma service (Wednesdays) didactic activities. The **attendance** to all didactic and clinical activities is **mandatory**.

Person in charge	:	Dr. Pablo Rodríguez Ortiz
Enrollment	:	6
Telephone	:	(787) 777-3535 X6250, (787) 777-3760
Dates Offered	:	Throughout Year except December and January
Hospital	:	UDH
Meeting Place	:	Trauma Center
Meeting Time	:	6:30 AM
Night Duties	:	Yes, every 4th night
Evaluation	:	Direct observation of student performance in handling trauma patients

MCIR 7017-2 Pediatric Surgery - (160-320) hours; (4-8) full time weeks. (V)
Prerequisite: Have completed and approved third year Internal

Medicine and Surgery Courses.

The student will have the opportunity to become a member at the Surgical Pediatric Service of the Children Hospital. He/she will participate in the evaluation and management of surgical conditions on children. These will include: surgical emergencies on neonates, tumors, traumas and congenital cardiovascular anomalies. Student will perform night duties every four nights under the supervision of the resident-in-charge.

Person in charge	:	Dr. Humberto Lugo Vicente
Enrollment	:	2
Dates Offered	:	Throughout Year, except December 15-January 15
Hospital	:	UPH
Meeting Place	:	University Pediatric Hospital
Meeting Time	:	7:00 AM
Night Duties	:	Yes, every 4th night
Evaluation	:	Oral exam, theme Paper and daily performance

MCIR 7018-1 Cancer Surgery - 160 hours; four full time weeks (F)
Prerequisite: Have completed and approved third year Internal Medicine and Surgery Courses.

The composition of the Cancer Program for this elective course will consist of: TGR, TPO, Tumor clinics, Breast Clinic, Head/Neck Clinic, Cancer detection and demonstration, and WTC. Other activities to be attended are: Cancer Seminar, Cancer Journal Club, Cancer conferences and procedures at the operating room.

Person in charge	:	Dr. Reynold López
Enrollment	:	3
Date Offered	:	Throughout the year
Hospital	:	UDH
Meeting Place	:	Surgery Department, 3rd. floor, UDH
Meeting Time	:	7:00 AM
Night Duties	:	No
Evaluation	:	Daily performance.

MCIR 7020-1 Clinical Neurosurgery – 160-320 hours; four or eight full time weeks (V) Prerequisite: Have completed and approved third year Internal Medicine and Surgery Courses.

This course is geared to familiarize the student to the different neurologic conditions amenable to surgery. He/she will have the opportunity to examine and participate in the treatment of ambulatory and hospitalized patients, will perform daily visits with residents and faculty; will attend weekly seminars and combined lectures on Neurosurgery, Neurology and Neuroradiology, as well as attend to surgical procedures.

Person in charge : Dr. Juan Vigo Prieto
 Enrollment : 2
 Dates Offered : Throughout the Year
 Hospital : UDH
 Meeting Place : 3rd. floor, UDH, Neurosurgery Ward.
 Meeting Time : 7:30 AM
 Evaluation : Oral exam
 Residency Coordinator: Yaritza Acevedo, Residency Coordinator, X 2943 or 1915
 Neurosurgery Section, Office 981A, RCM

MCIR 7025-1 Clinical Urology - 80 to 480 hours (V)
 Prerequisite: Have completed and approved third year Internal Medicine and Surgery.

The course aims to familiarize the student with the symptoms and physical findings of most of the urologic conditions.

He/she also acquire basic knowledge as to interpretation and performances of minor urologic procedures. The student also will get acquainted with the diagnosis, classification and treatment of the most common tumors in the genitourinary tract.

Person in charge : Dr. Antonio Puras
 Enrollment : 2
 Dates Offered : Throughout the Year
 Hospital : UDH
 Meeting Place : By arrangement
 Meeting Time : 8:00 AM
 Night Duties : No
 Evaluation : Daily work and case presentations to Faculty Members.

MCIR 7026-1 General Orthopedics Clerkship - 80 - 480 hours; four to twelve full Time weeks (V).
 Prerequisite: Have completed and approved third year Internal Medicine, Surgery, Pediatrics, OB-Gyn and Radiology.

Expose students to the usual problems presented at the general Orthopedic Service. Emphasis in the recognition and evaluation of Orthopedic conditions that require early diagnosis and treatment. Practical knowledge in the techniques of casting and splinting and the development of basic surgical skills.

This clerkship offers the unique opportunity to study the wide variety of problems presented to the general Orthopedic Service. The student will participate in the evaluation of patients in the Emergency Room, Outpatients and Inpatients. Weekly basic science lectures and journal club meetings. Daily rounds in the hospitals. Cover trauma, bone and joint infections, tumors, degenerative joint diseases and other musculoskeletal problems in children and adults. Sessions of casting and splinting will be included. Assistance in operative cases.

Person in charge	:	Dr. Francisco López
Enrollment	:	6 maximum
Dates Offered	:	Throughout the year, except June and July
Hospital	:	UDH
Meeting Place	:	Area 17, Orthopedic Clinic, Puerto Rico Medical Center
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Students will be evaluated on basis of their performance in handling trauma and general orthopedics

This same course is offered in the following hospital:

Course Number	:	MCIR 7026-4
Hospital	:	Veterans Administration
Person in charge	:	Dr. Magdiel Mayol
Enrollment	:	1
Dates Offered	:	By arrangement
Duration	:	2 or 4 weeks
Meeting Place	:	VAH, 9th floor
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Oral exam and daily performance

MCIR 7028-1 Otolaryngology Head and Neck Surgery - 80 - 160 hours (V).
 Two or four full time weeks.
 Prerequisite: Have completed and approved third year Internal Medicine and Surgery Courses.

The student will participate in all the activities held at the section under supervision of faculty staff and residents. This includes working at OPD, OR, wards and Emergency Room. He/she will be exposed to all aspects of the specialty.

Person in charge	:	Dr. Carlos Gonzalez-Aquino
Phone	:	787 758-2525, ext. 1910
Enrollment	:	4
Dates Offered	:	Throughout the Year
Hospital	:	UDH
Meeting Time	:	7:00 AM
Night Duties	:	No
Evaluation	:	According to student's achievement and interest in the course.

MCIR 7029-18	<u>Transplant Surgery and Immunology</u> – 160-320 hours; four or eight full weeks (V). Prerequisite: Have completed and approved third year Internal Medicine and Surgery Courses.
--------------	---

- (1) The student will be exposed to a specialty which comprises, immunological and surgical aspects of clinical transplantation.
- (2) He/she will be familiarized with the indications and selection process of kidney transplant recipients, with end stage renal disease as well as the evaluation and selection of living related donors and cadaver donors.
- (3) He/she will be exposed to the immunological identification, selection, and preparation of these patients including concepts of histocompatibility.
- (4) He/she will be exposed to the pre, intra, and postoperative management of these patients as well as the management of all medical and immunological complications.
- (5) He/she will be exposed to the immunosuppressive management to prevent and treat graft rejection.
- (6) The student will be assigned to the Transplant Ward with the supervision of the Transplant Surgeon and Transplant Nephrologist.

Person in charge : Dr. Eduardo A. Santiago Delpín
 Director, Renal Transplant Program
 Apartado 191227, San Juan, PR 00919-1227
 Enrollment : 1
 Dates Offered : Throughout the Year
 Hospital : Auxilio Mutuo Hospital
 Apartado 191227
 San Juan, PR 00919-1227
 Telephone : (787) 758-2000 X4247, Fax: (787) 766-4038
 Secretary e-mail: nrafanador@auxiliomutuo.com
 Secretary name: Sra. Nilsa Ramos Afanador
 Meeting Place : Auxilio Mutuo Transplant Office
 Night Duties : No
 Evaluation : Based on student's skills, attitudes, knowledge, hospital activity and other activities in which the preceptor participates.

MCIR 7030-1 Clinical Nutritional Support - 80 - 160 hours (V)
 Prerequisite: Have completed and approved third year Internal Medicine and Surgery Courses.

- (1) The student will participate in rounds with the attending physician three times a week.

- (2) Will evaluate the consult to the Service and discuss it with the attending.
- (3) Through a series of conferences, selected readings and lectures the student will be more able to cope with the multiple problems in the selection and management of the complications of Nutrition (enteral and parenteral) in critically ill patients.

According to the interest of the student, he will participate in some of the research or studies running at the Service.

Person in charge	:	Dr. William Méndez Latalladi
Enrollment	:	2
Dates Offered	:	Throughout the Year
Hospital	:	UDH
Meeting Place	:	Nutritional Support Office, 2nd. floor, UDH
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	Attendance, case evaluation and discussion.
Note	:	Students must coordinate the time and place of first day of the Course prior to the beginning day scheduled at the Surgery Department, 9 th floor, Medical Sciences Campus.

MCIR 7035-19 Thoracic and Cardiovascular Surgery Clerkship - 160 hours; four full time weeks (F)
 Prerequisite: Have completed and approved third year Internal Medicine and Surgery Courses.

This elective is designed to familiarize the student with the day to day management of patients suffering from cardiovascular diseases. During the rotation he/she will work as

a junior intern under the supervision of the resident and attending staff. He/she will share the responsibilities and privileges of management of patients with a wide variety of disorders. Upon completion of the course, he/she is expected to:

- (1) be able to recognize and start medical treatment for peripherovascular insufficiency,
- (2) develop a working knowledge of pre-post op. care of patients after cardiothoracic procedures,
- (3) acquire skills in invasive monitoring i.e. insertion central lines, Swan Ganz, arterial lines, etc.

Person in Charge	:	Dr. Efraín A. Defendini
Enrollment	:	By arrangement
Dates Offered	:	Throughout the year, except December
Telephone	:	(787) 754-8500 Ext. 2018
Meeting Place	:	Cardiovascular Center for Puerto Rico and the Caribbean, Second Floor
Meeting Time	:	8:00 AM
Night Duties	:	No
Evaluation	:	The student will be evaluated using the same criteria and forms currently used in the evaluation of General Surgery Residents.

RESEARCH COURSES

UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE

RESEARCH COURSES BY DEPARTMENT

	COURSE CODE	DEPARTMENT	CREDIT HOURS	COURSE COORDINATOR	CATALOG PAGE
1.	MANE 7105-1	Anesthesiology	160-192	Dr. Héctor Torres	31
2.	MCIR 7055-13	Emergency	160-120	Dr. Juan A. González	38
3.	MMED 7080-8	Gastroenterology	160-320	Dr. Esther Torres	61
4.	MOBG 7027-8	Gynecology	160-240	Dr. Josefina Romaguera	74
5.	MOFT 7015-08	Ophthalmology	160	Dr. Sixto García	77
6.	MPED 7105-2	Pediatrics	160-320	Dr. Clemente Díaz	102
7.	MPED 7106-2	Pediatrics	160-320	Dr. José G. Rigau	103
8.	MFIS 7015-8	Neurobiology	80-160	Dr. Carlos Jiménez	109
9.	MFIS 7018-8	Physiology	80-320	Dr. Jorge D. Miranda	109
10.	MPSI 7025-8	Psychiatry	160	Dr. Gloria González	117

RESEARCH IN BASIC OR CLINICAL SCIENCES PROGRAM

	COURSE CODE	DEPARTMENT	CREDIT HOURS	COURSE COORDINATOR	CATALOG PAGE
1.	MCBI 7001	Physiology	160-240	Dr. María J. Crespo	137
2.	MCBI 7002	Physiology	160-240	Dr. María J. Crespo	138
3.	MCBI 7003	Physiology	160-240	Dr. María J. Crespo	139

MCBI 7001

INTRODUCTION TO RESEARCH IN BASIC OR CLINICAL SCIENCES

Code	:	MCBI 7001
Credit Hours	:	160 – 240 hours (V)
Coordinator	:	Dr. María José Crespo (Lab. A-667 Physiology Dept, Ext. 5078, 5079)
Schedule	:	By agreement with the investigator
Duration	:	Semester, year or summer
Pre-Requisite	:	Medicine I, grade average of 2.50 or more and not having any pending repositions or remedial course.

COURSE DESCRIPTION:

Students will participate directly in clinical or basic projects of researchers from the University of Puerto Rico School of Medicine. The investigator will guide the students through the process of scientific investigation (hypothesis development, experimental design, methodology, and analysis of results). Students will participate directly and actively in one or more phases of the project in which they are enrolled. **This course is the first in a series of three sequential courses designed to provide medical students with formal experience in research.**

EVALUATION STRATEGIES:

The investigator will evaluate different aspects of the learning process and research experience of the students according to the following guidelines:

- a. Outcome of the research work (40%)
- b. Organization, documentation, and statistical analysis of data (20%)
- c. Quality of analysis and discussion of the results (30%)
- d. Non-cognitive aspects (e.g., attendance, interest, responsibility, etc.) (10%)

GRADING SYSTEM:

The students will be evaluated according to the following grading system: A, B, C, and F. The professor will submit the grade only when the student has complied with the requirements of the course, including contact hours, even though the project is still not finished.

REQUIREMENTS:

The student must submit a final report to the course coordinator summarizing his or her research experience. The report should include a title and brief description of the project, and summary of the results and his or her contribution to the research. This report will be part of the student's portfolio.

MCBI 7002

RESEARCH IN BASIC OR CLINICAL SCIENCES

Code : MCBI 7002
Credit Hours : 160 – 240 hours (V)
Coordinator : Dr. María José Crespo (Lab. A-667, Physiology Dept, Ext. 5078, 5079)
Schedule : By agreement with the investigator
Duration : Semester, year or summer
Pre-Requisite: MCBI 7001, GPA 2.50 or higher, must not have failed any Medicine course or not having any pending reposition or remedial course.

COURSE DESCRIPTION:

Students will participate directly in clinical or basic projects of researchers from the University of Puerto Rico School of Medicine. Students will participate directly and actively in one or more phases of the project in which they have enrolled during the previous phase (MCBI 7001). **This course, the second in a series of three sequential courses, is designed to provide medical students with an increasingly broad experience in the research process.**

EVALUATION STRATEGIES:

The investigator will evaluate different aspects of the learning process and research experience of the students according to the following guidelines:

1. Outcome of the research work (40%)
2. Organization, documentation, and statistical analysis of data (20%)
3. Quality of analysis and discussion of the results (30%)
4. Non-cognitive aspects (e.g., attendance, interest, responsibility, etc.) (10%)

GRADING SYSTEM:

The students will be evaluated according to the following grading system: A, B, C, and F. The professor will submit the grade only when the student has complied with the requirements of the course, including contact hours, even though the project is still not finished.

REQUIREMENTS:

The student must submit a final report to the course coordinator summarizing his or her research experience. The report should include a title and brief description of the project, a summary of the results and his or her contribution to the research, and copies of any abstracts and/or manuscripts that are submitted for presentation and/or publication. This report will be part of the student's portfolio.

MCBI 7003

ADVANCED RESEARCH IN BASIC OR CLINICAL SCIENCES

Code : MCBI 7003
Credit Hours : 160- 240 hours (V)
Coordinator : Dr. María José Crespo (Lab. A-955, Physiology Dept, Ext. 5078, 5079)
Schedule : By agreement with the investigator
Duration : Semester, year or summer
Pre-Requisite: MCBI 7002, GPA 2.50 or higher, must not have failed any Medicine I course or have pending repositions or remedial course

COURSE DESCRIPTION:

Student will participate directly in clinical or basic projects of researchers from the University of Puerto Rico School of Medicine. In this course, the third in a series of three research courses, enrolled medical students will be expected to complete the research project in which they have been enrolled during the previous two courses (MCBI 7001 and MCBI 7002). **The main goal of this course is to train students to analyze and organize their results in order to submit manuscripts for publication in peer-reviewed journals.** In addition, the results should be submitted for presentation at a local and/or national scientific forum. Following this course, the students will receive a certificate indicating that they have completed a series of courses in which they have received formal research training.

EVALUATION STRATEGIES:

The investigator will evaluate different aspects of the learning process and research experience of the students according to the following guidelines:

1. Outcome of the research work (40%)
2. Organization, documentation, and statistical analysis of data (20%)
3. Quality of analysis and discussion of the results (30%)
4. Non-cognitive aspects (e.g., attendance, interest, responsibility, etc.) (10%)

GRADING SYSTEM:

The students will be evaluated according to the following grading system: A, B, C, and F. The professor will submit the grade only when the student has complied with the requirements of the course, including contact hours, even though the project is still not finished.

REQUIREMENTS:

The student must submit a final report to the course coordinator summarizing his or her research experience. The report should include a title and brief description of the project, a summary of the results and his or her contribution to the research, and copies of any abstract and/or manuscripts that are submitted for presentation and/or publication. **Note that students are strongly encouraged to submit a manuscript for publication.** This report will be part of the student's portfolio.



UNIVERSIDAD DE PUERTO RICO
RECINTO DE CIENCIAS MÉDICAS
ESCUELA DE MEDICINA



**SOLICITUD PARA CURSOS DE INVESTIGACION POR DEPARTAMENTO
AÑO ACADEMICO 2015 - 2016**

FECHA : _____

NOMBRE DEL ESTUDIANTE : _____

NUMERO DE ESTUDIANTE : _____

MEDICINA : I _____ II _____ III _____ IV _____

TELEFONO : _____

DIRECCION : _____

NUMERO DE CURSO : _____

TITULO : _____

LUGAR : _____

FECHA : _____

TOTAL DE HORAS : _____

ESTIPENDIO : _____

PROFESOR A CARGO DEL CURSO : _____

Firma del Estudiante

Este estudiante ha sido aceptado para participar en este curso en la fecha arriba indicada:

Firma y Nombre del Profesor

Departamento

Teléfono

Este formulario debe entregarse en la Oficina de Currículo (A-868) para hacer los trámites de Pre-Registro.

240 hrs. máximo de horas en cursos durante año académico

De haber estipendio, el crédito en horas es la mitad del número de horas

ag



UNIVERSIDAD DE PUERTO RICO
RECINTO DE CIENCIAS MÉDICAS
ESCUELA DE MEDICINA



**SOLICITUD PARA CURSO DE INVESTIGACION: MCB1 7001, 7002, 7003
AÑO ACADEMICO 2015 - 2016**

FECHA : _____

NOMBRE DEL ESTUDIANTE : _____

NUMERO DE ESTUDIANTE : _____

MEDICINA : I _____ II _____ III _____ IV _____

TELEFONO : _____

DIRECCION : _____

NUMERO DE CURSO : _____

TITULO : _____

LUGAR : _____

FECHA : _____

TOTAL DE HORAS : _____

ESTIPENDIO : _____

PROFESOR A CARGO DEL CURSO : _____

Firma del Estudiante

Este estudiante ha sido aceptado para participar en este curso en la fecha arriba indicada:

Vo. Bo.: Dra. María José Crespo
Coor. Cursos de Investigación

Firma y Nombre del Profesor

Departamento

Fecha

Teléfono

Este formulario debe entregarse en la Oficina de Currículo (A-868) para hacer los trámites de Pre-Registro.

240 hrs. máximo de horas en cursos durante año académico

De haber estipendio, el crédito en horas es la mitad del número de horas

ag

**INTERDISCIPLINARY COURSES
(MISH, INTD)**

MISH 7005-08 Community-Based Primary Medicine Experience; 80-160 hours,
two to four weeks (V) ***renovacion.rcm@upr.edu***
Pre-Requisite: Have completed and approved Medicine I

The Community-Based Extended Course (CBED) is a multidisciplinary clinical experience. Participants are expected to spend between 2 to 4 weeks at a community health center or community based service organization located in any special community. The community center or service organization must provide the basic health services. The goal of this course is to offer participants the opportunity to increase experience in ambulatory primary care health and multidisciplinary centers located in areas of great need for health services and for multidisciplinary services as well. The CBED is based on an apprenticeship model in which the learner benefits from the knowledge and experience of a senior physician and the health center staff and their willingness to share patients and community health related activities.

Person in charge	:	Delia M. Herrera, LSW, MSW
Enrollment	:	1-8 students
Dates Offered	:	By arrangement
Meeting Place	:	By arrangement
Meeting Time	:	8:00 AM
Night Duties	:	Two to four ER night shifts where applicable
Evaluation	:	Evaluation will be based on:
		-Written report of community-base activities 10%
		-Student Evaluation Form 50%
		-Reflective Diary 20%
		-Daily Clinical Activity Log <u>20%</u>
		100%
		-Grading A, B, C, F

MISH 7010-08 Research Seminar in Hispanic Health Issues - 160-320 hours (V)
Pre-Requisite: Have completed and approved Medicine I

Independent study of a particular problem or issue related to Hispanic Health in United States and compared with Puertorricans in the island. The study will require extensive review of the literature. The student will meet regularly with the professor in charge to present progress reports. This process will end with the submission of a manuscript for possible publication.

The student will conduct a descriptive/documentary research. This type of research requires analysis of government documents, related literature, and research papers, among others. The focus of descriptive studies may include prevalent practices, points of view, and processes and tendencies of given area of study. The analysis consists in comparing, contrasting, classifying, and interpretation of collected information and data. Parametric statistical analysis is excluded of descriptive research.

Significant and innovative conclusions and approaches based on the documentary analysis is expected.

Person in charge	:	Dr. América Facundo
Enrollment	:	1-2 students
Dates Offered	:	Throughout the year
Meeting Place	:	Office 868, 8 th floor, Medical Sciences Campus
Meeting Time	:	8:00 AM
Night Duties	:	N/A
Evaluation	:	The student will be evaluated on the basis of the research work and quality of presentation. A theme research paper is required.

MISH 7017-08 Instructional and Evaluation Strategies in Medical Education, 40 – 80 hours (V)
Pre-Requisite: Have completed and approved Medicine III

This course is designed to develop knowledge and skills in medical education in 4th year medical students. It focuses on the longitudinal development of students in the areas of evidence-based medicine and problem-based learning. Through lectures, workshops, and supervised practice, students will develop small group teaching skills, seminar facilitation, and preparation of didactic materials related to the clinical epidemiology knowledge that underlies the practice of evidence-based medicine. Together with the didactic sessions, this course will have a practical component which will be provided by the Integration Seminar I course that is offered to 1st. year medical students. Students' performance will be supervised by the Course Coordinator, with the collaboration of other faculty members.

Person in charge	:	Dr. América Facundo
Enrollment	:	2-18
Dates Offered	:	Tuesday and Thursday
Meeting Place	:	A-865
Meeting Time	:	4:00 - 6:00 PM
Night Duties	:	No
Evaluation	:	Direct observation using evaluation forms:

- | | | |
|----|--|-----|
| a. | Seminars facilitations | 50% |
| b. | Evaluation by first year medicine students | 25% |
| c. | Evaluation by Faculty Medicine | 25% |



2015 – 2016

SE PROHIBE LA REPRODUCCIÓN O TRANSMISIÓN NO AUTORIZADA DE CUALQUIER PARTE DE ESTA PUBLICACIÓN POR NINGUN MEDIO ELECTRÓNICO O MECÁNICO, INCLUYENDO IMPRENTA, FOTOCOPIA O GRABACIÓN.

NO PART OF THIS MANUAL MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PRESS, PHOTOCOPYING AND RECORDING, OR BY ANY INFORMATION STORAGE OR RETRIEVAL SYSTEM WITHOUT AUTHORIZATION.

**TECHNOLOGIC SERVICE CENTER
CENTER FOR INFORMATICS AND TECHNOLOGY
UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF MEDICINE**

El Recinto de Ciencias Médicas de la Universidad de Puerto Rico es un patrono con igualdad de oportunidades en el empleo. No se discrimina en contra de ningún miembro del personal universitario o en contra de aspirante a empleo, por razón de raza, color, sexo, nacimiento, edad, impedimento físico o mental, origen o condición social, ni por ideas políticas o religiosas.

The Medical Sciences Campus of the University of Puerto Rico is an Equal Employment Opportunity employer. We do not discriminate against any university employee or candidate because of sex, color, place of birth, age, physical or mental handicap, origin or social condition, political or religious beliefs.

EL COSTO DE ESTE MANUAL (si alguno) CUBRE LOS GASTOS DE IMPRESIÓN Y ENCUADERNACIÓN.

THE COST OF THIS MANUAL (if any) ONLY COVERS THE PRINTING AND BINDING COSTS.