

## | CURRICULUM |

<b>Core Courses   14 units</b>		
CE 211	Clinical Epidemiology	2
CE 212	Basic Research Methodology	2
HP 201	Psychophilosophical Foundation of Learning-Teaching in the Health Sciences	2
Ortho 201	Surgical Musculoskeletal Anatomy	1
Ortho 202	Musculoskeletal Physiology and Metabolism	1
Ortho 203	Bone Histology and Pathology	1
Ortho 204	Introduction to Bioengineering	3
Ortho 204.1	Introduction to Bioengineering (Laboratory)	1
Ortho 212	Critical Appraisal of Orthopedic Literature	1

<b>Major Courses   16 units</b>		
Ortho 205	Orthopedic Diagnosis	1
Ortho 206	Orthopedic Surgical Techniques	1
Ortho 207	Pediatric Orthopedics	2
Ortho 208	Adult Orthopedics	2
Ortho 209	Orthopedics Trauma	2
Ortho 210	Spine Surgery	2
Ortho 211	Hand Surgery	2
Ortho 298	Special Problem in Orthopedics	4

**Total 30 units**

### DESCRIPTION OF COURSES

#### **Ortho 205 Orthopedic Diagnosis**

Study of clinical and laboratory diagnostic tools/maneuvers, their basic sciences' basis and analysis/interpretation of results as they are applied to Orthopedic conditions.

#### **Ortho 206 Orthopedic Surgical Techniques**

Laboratory/workshop on special orthopedic surgical techniques.

#### **Ortho 207 Pediatric Orthopedics**

Special topics/controversial issues in pediatric Orthopedics which include pertinent pathophysiology and etiology, relevant basic science concepts, diagnostic and therapeutic options, outcomes/ results and unresolved issues.

#### **Ortho 208 Adult Orthopedics**

Special topics/controversial issues in adult orthopedics which include pertinent pathophysiology and etiology, relevant basic science concepts, diagnostic and therapeutic options, outcomes/ results and unresolved issues.

#### **Ortho 209 Orthopedic Trauma**

Special topics/controversial issues in orthopedic trauma which include pertinent pathophysiology and etiology, relevant basic science concepts, diagnostic and therapeutic options, outcomes/ results and unresolved issues.

#### **Ortho 210 Spine Surgery**

Special topics/controversial issues in spine surgery which include pertinent pathophysiology and etiology, relevant basic science concepts, diagnostic and therapeutic options, outcomes/results and unresolved issues.

#### **Ortho 211 Hand Surgery**

Special topics/controversial issues in hand surgery which include pertinent pathophysiology and etiology, relevant basic science concepts, diagnostic and therapeutic options, outcomes/results and unresolved issues.

Further inquiries may be sent to:  
**The DEPARTMENT OF ORTHOPEDICS**  
**College of Medicine**  
 Tel no: 524-2203, 521-8450 loc 2457  
 Fax no: 526-0149  
 E-mail : deanupcm@epic.net



### CONTACT US

Application forms may be obtained from and returned to:  
 THE DIRECTOR  
 NATIONAL GRADUATE OFFICE FOR THE HEALTH SCIENCES

☎ (632) 526-5870, 523-1495  
 📠 (632) 523-1498  
 🌐 ngohs.upm.edu.ph  
 ✉ ngohs@post.upm.edu.ph  
 🐦 ngohs@post.upm.edu.ph




## NATIONAL GRADUATE OFFICE FOR THE HEALTH SCIENCES



# MASTER IN ORTHOPEDICS

**A PROGRAM OFFERING OF THE  
 COLLEGE OF MEDICINE  
 UNIVERSITY OF THE PHILIPPINES  
 MANILA**



## THE DEPARTMENT OF ORTHOPEDICS

The Department of Orthopedics is an academic unit of the College of Medicine, UP Manila and at the same time a service arm of the university's training hospital, the Philippine General Hospital. It has a full complement of faculty with master's degree and/or fellowship training in the different subspecialties of Orthopedics. The department has five sections, namely: Adult; Pediatrics; Trauma; Spine and Hand. It also has functioning services/units in Musculoskeletal Tumors, Ilizarov and Limb Deformity, Microsurgery and Sports Medicine. Aside from the Orthopedic Ward it serves, the department also has under its wings the new Spine Center and Orthopedic Learning Center. This center also houses the new Biomaterial Testing/Research Unit

## PROGRAM PREVIEW

In the Philippines, post-graduate training in Orthopedics Surgery consists of a four-year residency training program and actual competency clinical practice. However, teaching the important aspects of the science in Orthopedics, especially its foundation in the higher Basic Sciences, are often superficial, unorganized and in undirected manner. A thorough understanding of the basics could help a student of Orthopedics to adequately comprehend and analyze the long accepted principles and even controversial issues in the specialty. Likewise, an adequate understanding of the research process is important for the student of Orthopedics to keep abreast with the enormous amount of information being made available. Hence, the Master in Orthopedics is being offered by the College of Medicine, UP Manila through the Department of Orthopedics.

The Master in Orthopedics (M Orthopedics) Program is a two-year program with emphasis on the higher Basic Sciences, current trends in Orthopedic practice and the controversial issues in Orthopedics. The program also provides an introduction to the science of research and to the foundations of teaching and learning.

## PROGRAM OBJECTIVES

The M Orthopedics graduate is expected to be a proficient Orthopedic clinician with a solid basic science background. At the end of the course, the student is expected to be able to:

1. Explain the basic science basis for the Orthopedic conditions and their management
2. Proficiently detect, explain and analyze Orthopedic conditions
3. Formulate evidence-based management programs for Orthopedic conditions
4. Utilize the principles of the science of research in carrying out research in Orthopedics

## ACADEMIC INFORMATION

The Master in Orthopedics program is a 30-unit course offered by the College of Medicine, University of the Philippines Manila through its Department of Orthopedics. The degree of M Orth is conferred after successfully passing a comprehensive examination and completion of a special project/research on an Orthopedic topic. It is expected that the course would be completed in 2 years with a general weighted average of 2.00 or better in major courses and in all courses taken. A maximum residency of 5 years to finish the course is in effect.

The student will have access to the different research facilities of the University, in particular those in the National Institutes of Health. He will also have access to the UP College of Medicine Library's facilities including its computer network for research. The UP Manila campus also houses an animal laboratory where animal research can be performed.

Experts from related specialties both within and outside of the university have been invited to teach in the course. Likewise, some subjects will be given by UP's Clinical Epidemiology Unit and National Teacher Training Center for the Health Professions. The academic year is divided into 2 semesters of 16 weeks each, excluding registration and final examination periods. The 1st semester starts in August and ends in December, while the 2nd semester covers the period from January to May, with a two-week Christmas vacation in December. The summer session of 6 weeks following the 2nd semester is usually in June and July.

English is generally used as the medium of instruction. A full time student's normal load is 12-15 units per semester and 6 units during summer; a part-time student enrolls in half of these. The tuition fee is P990.00 per unit and the miscellaneous fee is around P1,050.00 and other fees is P350.00 per semester. A student with a load of 15 units in a semester matriculates P16,250.00 on the average while a foreign student pays an additional Educational Development Fund of US \$ 500.00 (US \$100.00 for residency only) for every semester.

There is a processing fee of P300.00 for Filipino applicants while interested foreigners are charged US\$ 30.00. Application documents will be accepted until the second week of April of each year.

Living accommodations for students may be provided in privately-owned housing units/dorms/apartment hotels. Dorms offer lodging and/or board. There are privately-owned eateries around the school.



## ADMISSION REQUIREMENTS

The following are the minimum NGOHS requirements:

1. Good scholastic record from any recognized institution of higher learning
2. Residency training in Orthopedics (minimum of 3 years)
3. Duly accomplished Application Form (available at the Graduate Office or through [www.ngohs.upm.edu.ph](http://www.ngohs.upm.edu.ph) together with the following documents:
  - \* original copy of the official Transcript of Records
  - \* 2 recommendations from former professors, supervisors or employers (forms included in the application packet)
  - \* receipt of processing fee paid at the UPM Cashier's Office
  - \* certified true copy of college diploma with the seal of the university and the signature of the registrar in ink
  - \* 4 passport-size photos
  - \* photocopy of birth certificate and marriage certificate for married female applicant only (NSO paper)
  - \* resume or curriculum vitae
  - \* essay on an 8-1/2" x 11" sheet of paper describing your motivation for pursuing graduate study and your view of self-directed learning as a method of instruction, and a description of your research interest
4. For foreign applicants, additional requirements include:
  - \* original Transcript of Records in English. If written in another language, must be translated to English and authenticated by the Philippine consulate/embassy from country of origin
  - \* certified true copy of diploma with the seal of the university and the signature of the registrar in ink. If written in another language, must be translated to English and authenticated by the Philippine consulate/embassy from country of origin
  - \* Official TOEFL score of at least 550 (written test) or 173 (computerized test); 61 (internet based) or other Certification of English proficiency equivalent to TOEFL (e.g. IELTS (band 6); a certificate that English is the medium of instruction in the university where the student has graduated from is sufficient to waive this requirement
  - \* affidavit of support or certification of financial capability
  - \* photocopy of passport (present original for verification)

## GRADUATION REQUIREMENTS

A candidate for the degree of Master of Orthopedics must comply with the rules on graduation of the University:

1. Completion of 30 units of formal courses (14 core courses and 16 major courses)
2. General weighted average of 2.00 or better in major courses and in all courses taken, provided there is no grade of 5.00
3. Passing a comprehensive examination
4. Completion and submission of a special project/research in Orthopedics.