



PONTIFICAL AND ROYAL

UNIVERSITY OF SANTO TOMAS

THE CATHOLIC UNIVERSITY OF THE PHILIPPINES

FACULTY OF MEDICINE & SURGERY

# PROSPECTUS

**USTMED150**

1871 ♦ CONTINUE ♦ CHALLENGE ♦ CONQUER ♦ 2021

University of Santo Tomas Faculty of Medicine and Surgery Sesquicentennial Celebration

# **UST HYMN**

**GOD OF ALL NATIONS**

**MERCIFUL LORD OF OUR RESTLESS BEING**

**SWEEP WITH YOUR GOLDEN LILIES**

**THIS FOUNTAIN OF PUREST LIGHT**

**TRACE WITH THE SAILS OF THE GALLEONS**

**THE DREAM BEYOND OUR SEEING**

**TOUCH WITH THE FLAME OF YOUR KINDNESS**

**THE GLOOM OF OUR DARKEST NIGHT**

**KEEP US IN BEAUTY AND TRUTH AND VIRTUES**

**IMPASSIONED EMBRACE**

**EVER YOUR VALIANT LEGIONS**

**IMBUED WITH UNENDING GRACE**

## **GENERAL INFORMATION**

### **HISTORY OF THE UNIVERSITY OF SANTO TOMAS**

The University of Santo Tomas is the oldest existing university in Asia and in terms of student population, the largest Catholic university in the world located in one campus. It was founded on April 28, 1611 by the third Archbishop of Manila, Msgr. Miguel de Benavides, O.P., together with Frs. Domingo de Nieva and Bernardo de Santa Catalina. It was originally conceived as a school to prepare young men for the priesthood. Located within Intramuros, the Walled City, it was first called Colegio de Nuestra Señora del Santisimo Rosario and later renamed Colegio de Santo Tomas in memory of the foremost Dominican Theologian, Saint Thomas Aquinas.

On November 20, 1645 Pope Innocent X elevated the College to the rank of a university and in 1680, it was subsequently placed under royal patronage. In 1785, for the exceptional loyalty shown by the administration and students who volunteered to defend Manila against the British invasion, King Charles III granted it the title of "Royal University". Pope Leo XIII made the University of Santo Tomas a "Pontifical University" on September 17, 1902 and in 1974, Pope Pius XII bestowed upon it the title of "The Catholic University of the Philippines".

In 1927, with the continuing increase in enrollment, the University moved from Intramuros to its present site in the district of Sampaloc which covers an area of 21.5 hectares. Since its foundation, the University's academic life has survived the tides of time even being transformed into a concentration camp during the Japanese occupation.

In recognition of the noble achievement of this institution, a number of important dignitaries have officially visited the University as it continues to flourish as a symbol of Catholic education in the Philippines, in Asia and in the world.

In 2011, the University of Santo Tomas celebrated its 400th year founding anniversary with the theme, "unending grace". The year-long festivities featured academic and socio-cultural events highlighting the Thomasian presence, impact and influence in different areas of the society. The UST Faculty of Medicine and Surgery herself, celebrated 140 years of existence making it one of the oldest faculties in the university. This quadricentennial event rallied all Thomasians here and abroad towards a renewed call for "unity, solidarity and teamwork" and a revisit of Christ-centered service to the family and community.

In 2012, the University of Santo Tomas opens the "new" century with a neocentennial event that reminds Thomasians of the Catholic nature of their education as well as the practice of their profession. This profession of unwaivering commitment to uphold the tenets of Catholic education is a fitting battlecry for the next generation of Thomasian physicians who shall continue to echo and mirror in their thoughts, words and deeds, the commitment, compassion and competence imbued by their Thomasian indoctrination.

### **Mission Statement:**

The University of Santo Tomas, the pontifical, and Catholic University of the Philippines, inspired by the ideals of St. Dominic de Guzman and guided by the teachings of St. Thomas Aquinas, dedicates herself to the pursuit of Truth through the production, advancement, and transmission of knowledge for the formation of competent and compassionate professionals, committed to the service of the Church, the nation, and the global community.

## **Vision Statement:**

Faithful to her centuries-old tradition of excellence, the University of Santo Tomas, envisions herself as a globally-recognized institution of higher learning, actualizing the professional and moral formation of her students, and effecting social transformation.

## **Objectives:**

Considering the size and scale of her organization (with twenty academic units, more than a hundred programs of studies, nearly fifty support sections, etc.) the University adopted numerous objectives and consequently categorized them into twelve areas. Each area espoused its own 'objectives'.

The twelve areas are: (1) Thomasian Identity, (2) Teaching, (3) Research, (4) Community and Extension Service, (5) Human Resources, (6) Physical Resources, (7) Financial Resources, (8) Growth and Expansion, (9) Public Presence, (10) Information Technology, (11) Leadership and Governance, and (12) Student Welfare.

## **Facilities:**

Besides the purely academic facilities, students of UST are entitled, subject to existing rules and regulations, to the free use of the University Chapel, Libraries, Museum, Gymnasium, Auditoria, Sports Complex, the Student Health Services and the Guidance and Counseling Department. Post Office, Restaurant, Studio, Bookstore, Bank and Hospital facilities are also available to students within the campus.

The University maintains a hostel in campus, which can accommodate a limited number of foreign students and guests.

## **HISTORY OF THE FACULTY OF MEDICINE AND SURGERY**

From the time it started receiving students in 1871 until 1927, classes in the Faculty of Medicine and Surgery were held in the Walled City. In 1927, freshmen and sophomore classes were moved to the present España Campus but the clinical years continued in Intramuros because clinical instruction was given at the San Juan de Dios Hospital. On September 21, 1944, the Walled City building that housed the classes was razed to the ground, during one of the early engagements for the liberation of Manila. And, when the war ended, the entire school transferred to the present campus, to the four-storey building it currently occupies. At present, the Medicine Building which was later renamed St. Martin de Porres Building houses eleven air-conditioned conference lecture halls, seven laboratories including a large dissection hall, an Ossarium, the Medicine Museum, and the galleries of Anatomy and Pathology. In addition, it boasts of a large auditorium with a seating capacity of 1,200, a state-of-the-art CME auditorium with a seating capacity of 350, an updated medical library, a high-tech learning resources unit, an adjacent building for the Research Center for the Health Sciences and numerous regular classrooms shared with the College of Nursing and the College of Rehabilitation Sciences.

## Historical Notes:

- 1611 The University of Santo Tomas was founded in Intramuros by the Archbishop of Manila, Miguel de Benavidez, O.P. and the Dominican Order, in honor of the theologian St. Thomas Aquinas.
- 1682 The Spanish government granted the petition of the University to establish a College of Medicine and Pharmacy but financial and technical difficulties were plentiful.
- 1785 King Charles II of Spain vested the title “Royal” on UST.
- 1871 The local government ordered the establishment of the medical school during the term of Rector Magnificus Domingo Treserra, O.P., Dr. Rafael Ginard was the first dean. The school offered a 7-year course leading to a Licentiate in Medicine.
- 1875 The medical school started affiliation with the San Juan de Dios Hospital for clinical training, by decree of King Alfonso of Spain.
- 1876 The first commencement exercises were held. There were seven graduates.
- 1902 Pope Leo XII conferred the title of “Pontifical” to UST.
- 1907 The curriculum was expanded; the public dispensary was organized.
- 1927 On completion of the Main Building in the new campus on España, first and second year medical classes were transferred from Intramuros.
- 1932 In compliance with orders of the Congregation of Studies of the Holy See, the first women students were admitted. This class of 30 graduated in 1937.
- 1942 The Japanese Army occupied San Juan de Dios Hospital. Clinical instruction was transferred to St. Paul’s Hospital and so was considered its first hospital.
- 1945 Ten months after the Battle of Manila, the Faculty of Medicine and Surgery moved to its present site, formerly the Education Building.
- 1946 On February 15, the Charity Division of the University Hospital opened at the old UST High School Building and on March 7, the Pay Division was established at its present site, formerly the Education Building.
- 1947 Pope Pius XII granted UST its title “The Catholic University of the Philippines”.
- 1948 Classes of the medical school were scattered at the old High School Building, the Main Building and a quonset hut beside the printing press.
- 1951 Construction of the rear, east and west wings of the present Medicine Building was started. Architect Julio Victor Rocha designed the building. It was inaugurated on September 27, 1952.
- 1958 The front and center wings of the building was completed.

- 1965 The University Hospital's Clinical Division on Forbes St. was constructed during the rectorship of Fr. Jesus Diaz, O.P. It was blessed and inaugurated by Rufino J. Cardinal Santos of Manila.
- 1970 Pope Paul VI, in his sojourn to the country, addressed the Asian Bishop's Conference that convened at the Medicine Auditorium.
- 1971 The Faculty of Medicine and Surgery marked its first centennial year.
- 1979 The Medicine Building which also houses the College of Nursing and Institute of Physical Therapy was renamed St. Martin de Porres Building on February 8.
- 1982 Opening of the Learning Resources Unit (LRU) and its facilities.
- 1992 The Continuing Medical Education (CME) Auditorium was constructed and inaugurated.
- 1993 The construction and inauguration of the Experimental Surgery Building and installation of the Electron Microscopy Unit and establishment of Molecular Biology Unit.
- 1995 The International Youth Forum was held at the Continuing Medical Education Auditorium of the Faculty of Medicine and Surgery on January 5-10.
- 1998 The Faculty of Medicine and Surgery hosted the 9th Biennial Meeting of the International Association of Catholic Medical Schools held at the Continuing Medical Education Auditorium on February 4-7.
- 1999 The Integrated Curriculum was introduced. These involved the integration and synchronization of topics taken in various courses in the first, second and third year levels (horizontal integration).
- 2001 Implementation of the Innovative Curriculum using the Problem Based Learning (PBL) approach for two (2) consecutive years (2001-2003).Expansion of Medical Informatics Center (formerly LRU) and establishment of the Health Science Research Management Group (HSRMG).
- 2003 Traditional (subject based) curriculum re-implemented with more integration of subjects in all year levels. HSRMG become the Research Center for Health Sciences (RCHS).

## **MISSION STATEMENT**

The Faculty of Medicine and Surgery of the Pontifical and Royal University of Santo Tomas commits herself to the pursuit of excellence in medical education, health science research and community services, guided by Christian ethics and values.

The UST Faculty of Medicine and Surgery affirms her task in the development and formation of competent, compassionate, and committed Thomasian physicians in the delivery of health care services of global standards and in accord with the needs of the nations.

## **Vision Statement:**

By the year 2018, the UST Faculty of Medicine and Surgery is the premiere medical school and benchmark of holistic Catholic medical education in Asia and in the World.

## **Objectives:**

1. To remain the Center of Catholic Medical Education in the country.
2. To be the recognized Center of Innovative Medical Curriculum.
3. To be the model of Christ-centered community extension services and projects in the country.
4. To be a recognized Center of Health Science Researches.
5. To establish strong and sustainable national and international networks and linkages.
6. To implement pro-active and systematic governance.

## **Graduates Attributes**

The Thomasian graduate must be a competent, committed, compassionate:

1. Health Care Provider
2. Teacher / Academician
3. Researcher
4. Administrator / Manager
5. Social Mobilizer

## **Core Values**

Altruism

Commitment

Competence

Compassion

Courage

Excellence

Honesty

Humility

Integrity

Professionalism

Respect

Service

## COMPETENCIES OF A UST MEDICAL GRADUATE

AT THE END OF THE FOUR-YEAR MEDICAL COURSE in UST, the graduate should be able to assume the following roles:

1. Primary Physician
2. Researcher
3. Educator/Academician
4. Social Mobilizer
5. Administrator/Manager

Consequently, the UST Medical Graduate is expected to have the following skills and competencies:

1. Presented with a patient, the graduate should be able to:
  - elicit, interpret and record a good and appropriate history
  - perform a good/complete physical examination
  - arrive at a reasonable initial clinical impression and discuss differential diagnoses
  - formulate appropriate comprehensive diagnostic and management plans for common conditions
  - give initial management for emergency conditions and refer accordingly
  - perform common minor clinical procedures
  - assist senior professionals at clinical procedures
  - work harmoniously with other members of the health team
  - explain effectively to his patients and other layman-audience:
    - a) the structure and functions of the human body
    - b) the causes, natural history, principles of management of common illnesses
    - c) the important effects of socio-cultural and environmental influence of health and disease
    - d) disease prevention and health promotion strategies
    - e) organization of health care in the country and availability of services in community.
  - understand and deal adequately with different emotions
2. As a medical practitioner, he/she should be able to:
  - interact with members of the medical profession



- undergo further clinical training in any of the 4 major specialties (Internal Medicine, Pediatrics, OB-Gyn, Surgery).
- competently administer primary and emergency care with the intention and outcome of patient stabilization
- develop follow-up care for cases that have stabilized and been treated in hospital and discharged
- utilize information technology for practice
- manage his/her own learning
- conduct himself/herself as a reflective accountable practitioner
- consider differing cultures, views and beliefs relating to human body and health care
- behave as a true Thomasian Catholic physician at all times
- render priority service to the Filipino citizen and nation

3. Given a community, he/she should be able to

- acquire and apply a knowledge and familiarity of the acute/chronic diseases prevalent in the community
- purview a community and identify its basic needs
- create plans of action to adequately address those needs
- have a working knowledge of the impact of poverty, ethnicity and local epidemiology on health
- know the structure of the health care system and its economic implications
- outline levels of responsibility in the health care system he is in
- take the lead in health promotions or prevention programs or advocacies within the primary care setting

4. In undertaking Research, he/she should be able to

- have a knowledge of basic research methodology
- identify a research questions
- critically analyze evidence
- develop an initial/working protocol for experimental or clinical research
- use research and scientific methodologies to improve patient care
- be aware of and apply the principles of ethics in research
- recognize ethical problems in clinical situations and apply pertinent ethical principles as learned from the Catholic university
- utilize information technology for research

5. As an Educator/Academician, he/she should be able to

- teach the basic medical sciences
- pursue further post-graduate masteral or doctoral degrees
- adjust to the continuing developments in Medicine
- evaluate his own capabilities and personal effectiveness and seeks ways to improve continually
- be an undisputed example of Christian professional and ethical behavior

## REQUIREMENTS FOR ADMISSION TO THE FIRST YEAR

The Faculty of Medicine and Surgery of the University of Santo Tomas admits a total of 500 students to the first year. An Admission Committee screens all applicants for admission. After thorough study of all pertinent information, the committee makes a list of those who in their opinion are best suited to the study of Medicine and recommends that they be accepted for enrolment.

Applications from the following are not considered:

1. Those who have incurred more than eleven (11) units failure;
2. Those who have been convicted of any crime;
3. Those who have not completed a B.A. or B.S. degree at the time of the application for non-resident aliens and for Filipino studying in foreign schools;
4. Those who have advanced credits in medicine

Several requirements must be fulfilled before the Admissions Committee can consider any applicant for admission:

1. The applicant must have completed a 4-year Bachelor of Arts or Bachelor of Science degree;
2. The applicant must have taken and passed all subjects required for admission to the first year;

In addition to a Bachelor's Degree, it is recommended that the applicant must have earned credits in the following subjects which may either be within or in addition to the baccalaureate degree requirement.

- |    |           |   |          |
|----|-----------|---|----------|
| a. | Biology   | - | 12 units |
| b. | Chemistry | - | 10 units |
| c. | Physics   | - | 3 units  |

3. The applicant must fill up completely and accurately one (1) application form (available at the Admissions Office, Second Floor, St. Martin de Porres Building) and submit the same to the Admissions office not later than December 1 of every year;
4. The applicant must submit his/her complete transcript of records of all college grades obtained up to and including those of the first semester of the school year during which the application is made. The deadline for submission of transcript is on December 15 of each calendar year;
5. The applicant must submit authenticated copies of his/her birth and baptismal certificates. Certificate of citizenship for aliens and naturalized Filipinos is required. Applicants whose parent (s) is(are) graduate(s) of UST must submit photocopy(ies) of their parent's/parents' diploma(s).

6. Together with the other documents, a photocopy of the NMAT scores should be handed in.
7. A certificate of good moral character signed by the academic dean and the Office of Student Affairs of their school must be submitted.
8. Two (2) signed 2" x 2" photographs are to be submitted with the application form. The photographs should have been taken within 60 days of the date of application.
9. Filipinos residing in the Philippines are required to pay a processing fee of one thousand two hundred peso (PHP1,200.00) to cover expenses for the examination given by the Admissions Committee of the Faculty of Medicine and Surgery, processing and mailing costs, etc. The fee is not refundable.
10. Applicants not residing in the Philippines are required to pay a processing fee of three hundred US dollars (US\$300.00) which is not refundable.
11. Donations in any form are not a prerequisite for admission.

### **Rules for Selection**

The general weighted average of transcript of records is a major basis for selection.

In the screening of applicants to the Medical School, the Committee evaluates the academic as well as the non-academic qualities (personality, motivation, etc.).

### **Foreign Applicants**

It is the policy of the University of Santo Tomas to maintain its doors open to foreign students. At the Faculty of Medicine and Surgery, a limited number of foreign students is accepted each year. Applications should be in by November 29.

Foreign applicants are also required to take and pass the NMAT.

Applicants who are graduates of foreign schools as well as 9F (student) visa holders are required to pay an Out-of-State fee of ten thousand US dollars (US\$10,000.00) if accepted. The Out-of-State fee is a one-time payment upon enrolment and is not refundable.

### **Enrollment Requirements**

All applicants selected for admission are notified of their acceptance and are required to report to the Office of the Secretary of the Faculty of Medicine and Surgery. They must comply within a specified period of time in order to be enrolled in the Medical School, otherwise this offer of acceptance will be forfeited in favor of the other deserving applicants. They should:

3. Pay the Treasurer's Office of the University the required tuition fee per semester plus miscellaneous fees.

- |                         |   |  |     |
|-------------------------|---|--|-----|
| 1 <sup>st</sup> payment | - | upon enrollment                          | 50% |
| 2 <sup>nd</sup> payment | - | on or before the preliminary examination | 30% |
| 3 <sup>rd</sup> payment | - | within one week before the final exams   | 20% |

[illegible]

## **Students with PVAO/USVA Education Benefits**

1. Students enjoying PVAO and USVA educational benefits shall be admitted if they submit complete papers upon enrollment. The PVAO pays 100% of the fees.
2. Students with unpaid accounts and who transfer to other schools shall not be issued any credentials unless the total amount due to the University is paid.
3. No credentials (transcript of records and/or diploma) shall be released to students until they settle their financial obligations with the University.

## **Rules on Discipline**

Students are bound by the Code of Conduct and Discipline of the University outline in the University of Santo Tomas Student Handbook issued by the Office of Student Affairs.

### **Change or Dropping of Subject or Course**

1. Any addition of course or change in schedule shall be done during the enrolment period, subject to the approval of the Office of the Dean and the Office of the Registrar.
2. Dropping of course/program during the enrolment period shall be considered as cancellation of enrolment for the course/program in question.
3. Dropping of course/program may still be done before the preliminary examination. No request for drop of course/ program will be entertained after the preliminary examinations.
4. A student who drops a course without approval from his Dean obtains a failing grade, i.e., "WF" (Withdrew without permission – Failed) in the course.
5. In meritorious cases, for reason of illness or other justifiable reasons, the Dean may act on a request to drop a course after the preliminary examinations.
6. To drop a course, the student must fill up UST Form 4b, secure the approval of the Dean concerned, and obtain from the Registrar's Office the corresponding endorsement to the Accounting Division for adjustment of fees.

## Student Number

Every student should carefully indicate his STUDENT NUMBER on the Registration Form – the key to correct reporting of grades.

## School Charges and Refund of Fees due to Dropping of Course

The following rules will be observed on school charges and refund of fees due to dropping of course in the Faculty of Medicine and Surgery:

### I. Dropping of Course After the Official Start of Classes:

Students who officially drop a course within the first two weeks from the official start of classes shall be charged as follows:

First Week	-	10% of the total fees for the course
Second Week	-	20% of the total fees for the course

After the second week of classes, concerned students shall be charged in full. Matriculation fee is not refundable.

### II. Freshmen students who have submitted their credentials but decided not to enroll in the Faculty of Medicine and Surgery shall be charged a withdrawal fee of five thousand pesos (P5,000.00)

### III. Application for refund of fees and/or adjustments should be made at the Accounting Division promptly after dropping the course. The date of the actual submission of dropping forms at the Accounting Division shall be the reckoning date for refund and/or adjustment purposes.

## Attendance and Examination

Every student is required to attend at least 80% of the class days for every subject in order to earn the corresponding credits. The allowable number of absences is limited to 20% of the total required hours. A student who incurs absences in excess of 20% of the required class days shall receive a grade of "FA" (Failure due to absences) for the subject.

A student who fails to take all the required examinations (Preliminary and Final Examinations) on the scheduled dates shall be given a mark of "INCOMPLETE" in the subject or subjects concerned. Completion examinations are given to those who prove that their failure to take the examinations was for a justifiable cause as determined by the teacher concerned. A student who fails to remove an incomplete grade within one school year shall be given a failing grade. For Rules on Examination, refer to the Rules on Promotion issued by the Office of the Dean.

## Numerical 5-point Grading System

(Fully implemented since 1975-1976)

1.00	-	96-100	-	Excellent
1.25	-	94-95	-	Very Good
1.50	-	92-93	-	Very Good
1.75	-	89-91	-	Good
2.00	-	87-88	-	Good
2.25	-	84-86	-	Good
2.50	-	82-83	-	Fair
2.75	-	79-81	-	Fair
3.00	-	75-78	-	Passed
5.00	-	74 & below	-	Failure

## Credits and Grades

Enrolment in any subject without the necessary prerequisites is not valid and shall not be credited regardless of the grade obtained. Yearly subjects must be taken for one year; semestral subjects for one semester. No compression of time periods shall be allowed. The maximum load for irregular students is 15 units per semester. No overload is allowed.

## Rules on Promotion

Refer to a separate pamphlet issued by the Dean's Office.

## Graduation Requirements

For the degree of Doctor of Medicine (M.D.), a student MUST satisfactorily: 1) complete 12 months of clinical clerkship as certified by the Director of Clinical Programs to include: a) no failure in any service; b) no deficiencies (no incomplete grade, no make-up grades); and c) passing the Revalida; 2) settle all accounts with the University Treasurer's Office; 3) submit/present a group Research Scientific paper; and 4) secure clearance from the Central Supply Service, Laboratory, Dormitory, X-ray, Records Section and Accounting Department.

## Graduation Requirements of the University

To be eligible for graduation, a candidate should meet the following conditions: a) satisfactory compliance with all academic, non-academic and other requirements of the given faculty/college or school of the University; and b) residence in the University for at least the last two years of his program; c) payment of all financial and property obligations to the University.

A candidate for graduation should file an application for graduation (Form 24) within the first month of the last academic year. Form 24 may be secured from the Office of the Registrar.

## Graduation Honors

The following honors are awarded for graduating students in the Faculty of Medicine and Surgery subject to the following conditions:

Honors	Based on General Average
Cum Laude	88.00 - 89.99
Magna Cum Laude	90.00 - 93.99
Summa Cum Laude	94.00 and higher

\* Fully implemented AY2015-2016

Provided:

1. that the candidate obtains at least a Meritus in the Oral Revalida;
2. that the candidate has been in residence for at least six consecutive semesters immediately preceding the date of graduation. Those with even one grade of failure do not qualify for honors;
3. grades in all academic subjects will be included in the computation of the weighted general average;
4. he/she has completed in the University at least 76% of the total number of academic units or hours for graduation;

## CURRICULUM WEIGHTED SCORE SYSTEM

Subjects	Hours	Total Points/Weighted Score
<b>FIRST YEAR</b>		
Gross and Clinical Anatomy	272	10.0
Physiology	206	8.0
Biochemistry	170	8.0
Histology	68	3.0
Neuro-Science	66	2.0
Preventive Medicine I	102	1.5
Clinical Epidemiology I	90	1.5
Medical Ethics I	34	1.0
<b>General Weight</b>		<b>35.0</b>
<b>SECOND YEAR</b>		
Medicine I	204	6.0
Pathology	170	7.0
Pharmacology-Therapeutics	155	5.0
Microbiology	72	4.0
Surgery I	204	3.0
Clinical Pathology	38	2.0
Obstetrics I	51	1.5
Parasitology	28.5	.5
Medical Ethics II	34	1.0
Clinical Epidemiology II	90	1.0
Neuroscience	34	1.0
Behavioral Medicine I	34	1.0
Preventive Medicine II	34	1.0
Pediatrics I	17	0.5
Anesthesiology	17	0.5
<b>General Weight</b>		<b>36.0</b>
<b>THIRD YEAR</b>		
Medicine II	340	10.0
Surgery II	238	7.0
Pediatrics II	170	5.0
Obstetrics II	51	1.5
Clinical Neuroscience II	51	1.5
Behavioral Medicine II	51	1.5
Gynecology	51	1.5
Legal Medicine	51	1.5
Clinical Epidemiology III	34	1.0
Preventive Medicine III	34	1.5
Ophthalmology	34	1.0
Medical Nutrition	34	1.0
Radiology	34	1.0
Otorhinolaryngology	34	1.0
Medical Ethics III	34	1.0
Dermatology	17	0.5
Rehabilitation Medicine	17	0.5
Radiology	17	0.5
<b>General Weight</b>		<b>37.0</b>



## **COURSE DESCRIPTION**

### **GROSS AND CLINICAL ANATOMY**

The course aims to enable the students to possess adequate knowledge of the normal form, size and structure as well as relationships of the different parts of the human body, comprehension of the relevance of structure to function and ability to apply the learned anatomical knowledge to disease entities.

Teaching methodologies include orientation/briefing; discussion recitation; cadaver dissection; live video demonstration of prosected cadavers, computer –generated teaching aids and integrated case discussion.

The course includes an 8-hour session in Gross Human Anatomy; 1-hour lecture in Clinical Anatomy and 1-hour lecture in Embryology or Genetics per week.

The subject is given to first year medical students for a total of 340 hours annually.

### **HISTOLOGY**

The course is designated to provide essential knowledge of the microscopic structures of the human body. It enables the student to develop skills in the recognition and accurate understanding of the structures of cells, tissues and organs.

This knowledge is dynamic as it correlates structures to function, to create a better and more comprehensive understanding of the different tissues and organs of the body.

Teaching strategies include lecture-projection, microscopy, discussion session of microscopic slides using microprojector and video monitors during which time clinical and physiopathological corrections are pointed out. Audio-visual sessions, seminars and demonstrations also form part of the teaching strategies. Integrated case discussion of selected topics prepare the students for clinical exposure.

The course is given to first year medical students for a total of 102 hours.

### **BIOCHEMISTRY**

The yearly subject aims to provide students with a comprehensive working knowledge of basic Biochemistry including Molecular Biology and Basic Nutrition to facilitate their understanding of the molecular basis of diseases and subsequently enable them to relate Biochemistry to future clinical subjects in the medical curriculum.

The didactic portion in Biochemistry is divided into different blocks based on the different systems of the body and integrated with other disciplines like Physiology, Anatomy, Neuro-Anatomy and Histology. There are eleven blocks for four shifting periods in the entire school year. They are namely: the Generalities, Gastrointestinal, Respiratory, Endocrine, Cardio-vascular, Hematopoietic, Renal, Molecular Biology, Special Senses, Specialized Tissues and Nutrition Blocks.

In the Generalities Block, chemistry and functions of carbohydrates, lipids, proteins and nucleic acids, enzyme kinetics and mechanisms and coenzymes are discussed. The Gastrointestinal Block deals with digestion of carbohydrates, proteins and lipids, energy metabolism, bioenergetics and biological oxidation.

Oxygen transport and storage, metabolism and toxicity, chemistries of hemoglobin, myoglobin, respiration and carbon dioxide transport are included in the Respiratory Module. The Endocrine Block deals with introduction to metabolism, hormones – its classification and mechanisms, membrane receptors and signal transduction, metabolism of carbohydrates, proteins and lipids (fatty acids, triacylglycerol and ketone bodies metabolism).

The Cardio-vascular Block consists of cholesterol, eicosanoids, phosphoglycerides, sphingolipid and nitric oxide metabolism. Blood, its components, blood coagulation, red blood cell, heme and iron metabolism, the immunoglobulins and complement systems are dealt with in the Hematopoietic Block. The Renal Block is made up of urine and kidney metabolism together with acid base and fluid electrolyte imbalance. The Molecular Biology Block deals with gene expression and regulation and recombinant DNA technology.

The topics that are included in the Special Senses and Specialized Tissues Blocks are eye metabolism and biochemistry of the connective tissue. The Nutrition Block gives us knowledge on basic nutrition and clinical correlation on selected topics in Biochemistry.

Laboratory experiments are conducted to augment the didactic concepts and encourage research activities. Problem sets, case discussions, journal researches in relation to the case discussions are regularly assigned to enhance student learning.

The course is given twice weekly for four hours each meeting, allotted as follows: 3-hour lectures, 2-hour case discussions, problem sets and 3-hour experimentation and conference-discussion. A total of 272 classroom hours is devoted to the subject.

## **PHYSIOLOGY**

The course aims to make the students understand the normal functions of the different organ systems of the body, the pathophysiologic mechanisms of diseases usually seen in the community and the physiologic principles involved in the treatment of these diseases. It also aims to develop attitudes and values essential for a primary health care physician and the ability to do problem solving and critical analysis using the data from case studies, laboratory experiments, and research projects.

Basically, the course includes the study of the physiology of the cell and the nervous system, the cardiovascular system, blood and immunity, respiratory system, renal fluid electrolyte and acid-base balance, the gastrointestinal system and the endocrine system. Special topics like sports physiology, fetal and neonatal physiology, aviation, space and underwater physiology, and physiology of aging.

Learning activities consist of lectures, class discussions, readings, laboratory work, data evaluation, sessions and laboratory conferences, student seminar reports, case discussion, film projections and research projects.

The students are evaluated on the basis of their performance in written exams, class discussion, laboratory activities and laboratory conferences, seminars, research, and case discussions.

The course is a yearly subject given to first year medical students eight hours a week for a total of 272 hours.

## **PHARMACOLOGY**

Basic Pharmacology is a yearly subject given to second year students, 5 hours once a week for a total of 170 hours. The aim of the course is to enable the students to rationally use drugs in the prevention, diagnosis and treatment of human diseases, to rationally apply non-drug modes of prevention and treatment of human diseases and to develop awareness and gain basic skills in the investigative aspect of Pharmacology.

The course has three main activities, namely: didactic, laboratory and the student seminar/applied therapeutics / community work on drug utilization. The didactic part includes lectures and small group discussions on the basic concepts of pharmacology of the various classes of drugs classified according to therapeutic categories. The topics are synchronized as much as possible with those of other basic departments namely Medicine, Pathology and Laboratory Medicine. Emphasis is given to pharmacodynamics, pharmacokinetics, adverse effects and the therapeutic uses of each class of drug, making use of prototypes whenever possible. At the end of the session, the students practice prescription writing on the topic under study, making use of simulated cases. In all the discussions, the international non-propriety name (INN) is utilized and special emphasis is given on the drugs belonging to the “core list” of the current edition of the Philippine National Drug Formulary (PNDF).

The laboratory experiments are designed for 4-5 hour sessions and are aimed at developing in the students the ability to design experiments using indigenous medicinal plants as well as the ability to make accurate observations, gather data and to use appropriate statistical analysis to arrive at statistically valid conclusions.

For the students seminars, the students are assigned by teams to research on specific seminar topics, the output of which the students present in a conference attended by the other students and their respective faculty staff. Other student groups are assigned to study and analyze the actual therapy given to specific selected cases in the ward, emphasizing the rational use of drugs.

Another activity of the students in Pharmacology is the community work in selected barangays to study drug utilization patterns on common primary health care problems e.g. diarrhea, cough and colds, high blood pressure, etc. The students are asked to design their own research protocol, the results of which are presented to the class in the presence of the facilitators.

Clinical Pharmacology is given to the fourth year students handled by Pharmacology Faculty Staff members in the Clinical Department. 1-2 hours/week, during their rotation through Clinical Clerkship under the major departments at the UST hospital (USTH). During these sessions, the basic concepts and principles of Pharmacology are applied to clinical situations, real or simulated, preferably the former. The sessions are aimed at developing a firm understanding of the core knowledge, skills and attitudes that enable the medical graduates to practice rational therapeutics. The principles of problem-based pharmacotherapy are applied in all cases.

## **MICROBIOLOGY**

The course focuses on both basic and medical microbiology. During the first semester, the students are expected to have an understanding of microbial bacteriology including food and water bacteriology.

In the second semester, systemic mycology and virology are taught with small group tutorials on cases towards the end of the semester.

Teaching strategy includes correlates, small group tutorials and skills laboratory. Audio-visual aids and actual demonstration of organisms are shown to the students.

The course is a yearly subject given to second year medical students, four hours a week (two hours lecture and two hours skills laboratory or small group tutorial) for a total of 136 hours.

## **PARASITOLOGY**

The aim of the course is to enable the students to acquire basic knowledge of common parasitic diseases of man in the Philippines. The course includes the morphology, biology, life cycles and classification of parasites in man. It emphasizes the epidemiology, pathology, diagnosis and control of parasitic diseases in man.

Emphasis is placed on stages of parasites found in man which cause infection and give rise to symptoms or can be used to diagnose the infections. Correlation is made between stages of parasites commonly found in man and the symptoms elicited by the disease. Practical diagnostic procedures are mastered in the laboratory.

Teaching strategy includes correlates, small group tutorials, skills laboratory and projection and demonstration of parasites commonly found in the Philippines.

The course is a semestral subject given to second year medical students, three hours a week for a total of 51 hours.

### **CLINICAL PATHOLOGY**

The course aims to acquaint students with the scientific use of clinical laboratories (Hematology, Clinical Microscopy, Clinical Chemistry, Immunology, Blood Banking) as a basis for the understanding, diagnosis and treatment of diseases. Emphasis is made on selection and interpretation of laboratory tests used in the practice of medicine as well as on acquiring some understanding of the technology used in clinical laboratories.

Instructors are given in the form of correlates, small tutorials on cases, skills laboratory and demonstration of laboratory results.

This is a semestral subject given to second year medical students, four hours a week for a total of 68 hours.

### **PATHOLOGY**

Pathology is a basic discipline of Medicine which studies human diseases. It pertains to the study of the nature, course, cause, and mechanism of diseases with their structural and functional derangements.

General Pathology is a yearly subject with a total of 238 hours. The course basically includes Basic and Systemic Pathology, Postmortem examinations, Surgical Pathology (Histopathology), Cytology, Clinico-Pathologic Correlation and Basic Research. Methodology: Teaching strategies include general and special lectures, lecture-demonstration, laboratory sessions, small group discussion and clinico-pathologic conference.

The Department of Pathology is one of the most modern and most complete departments in its category in the country. The materials and equipment include autopsy materials, biopsy and cytology specimens, pathology library, slide set and microscope for each student, computerized audio-visual equipment and fully air-conditioned laboratory and lecture rooms.

### **PEDIATRICS**

#### **Pediatrics I**

The medical student is formally introduced to the field of Pediatrics in Pediatrics I.

The course focuses on physiologic principles of growth and development from birth to adolescence. Preventive pediatrics with emphasis on the expanded program of immunization (EPI) is taken. Nutrition and infant feeding as well as growth monitoring are emphasized. A short course in physical diagnosis demonstrates the techniques in history taking and physical examination, and how these vary in the newborn infant through childhood and adolescence.

To highlight these normal events in the child, some common problems in the newborn, the older child and the adolescent will be discussed. In this course, the student will realize that the health concerns of children differ from those of the adults and that the child's response to illness varies with their age. Indeed, the child is not a miniature adult.

Pediatrics I is a semestral subject with 34 hours. The course makes use of lecturettes/interactive lectures, small group discussion through case presentations, film showing, decury/skills laboratory and discussions on Pediatric study/research.

## **Pediatrics II**

Pediatrics II is a yearly subject consisting of Didactic, Decury and Community Pediatrics. It is given a total of 170 hours.

Didactic Pediatrics comprises 102 hours or 60% of Pediatrics II. It is given 2 hours a week throughout the school year. It is divided into 4 modules consisting of 2 to 3 major subspecialties. The students are introduced to common and must-know diseases under these specialties. The teaching method is in the form of lectures, group discussions and grand rounds presentation.

Decury is given 34 hours or 20% of Pediatrics II. This course assigns students to clinical pediatrics in the form of decury sessions (practicum). Students are assigned cases in the pediatric ward or outpatient department. The art of history taking and physical examination in a child and basic pediatric procedures is reinforced. Teaching method includes lecture demonstration and return demonstration.

Community Pediatrics consists of 34 hours devoted to the exposure of the student to children and their family in an actual community. Each student is assigned a family in an underserved, disadvantaged community under the supervision of faculty members. These students are expected to help not only in the health supervision of the children but also in giving the entire family advice on all other aspects of the environment that may influence their health and well-being. This gives the student the opportunity to learn more about primary care, health education and home management of common pediatric emergencies. The students give immunizations (EPI), learn to manage upper respiratory infections and diarrhea with emphasis on oral rehydration therapy. They assess the nutritional state and monitor growth of infants, children and conduct mother's classes on child care and health supervision.

## **MEDICINE**

The teaching of Medicine in the undergraduate years is one continuous program from the second to the fourth year. There are three stages in the program:

Medicine I, Introduction to and essentials of Clinical Medicine, Second Year

Medicine II, Problem-solving in Internal Medicine, Third Year

Medicine III, Clinical Clerkship in Internal Medicine, Fourth Year

A thorough background in Anatomy, Physiology and Biochemistry in first year is a prerequisite to the study program, thereof integrating basic and clinical subjects in the various levels.

## **Medicine I (Introduction and Essentials of Clinical Medicine)**

The focus of teaching is on the following: problem oriented history taking semiology, recognition and interpretation of clinical signs, education in the techniques of physical examination and in the use of common medical instruments in clinical diagnosis (stethoscope, sphygmomanometer, percussion hammer, ophthalmoscope, otoscope, tape measure, etc.).

A satisfactory performance in a practical examination per semester is required to pass the subject.

The program includes 2 hours of lecture and/or demonstration and 4 hours of decury class per week. Decury sessions are held in the hospital wards with active participation of the students with the faculty serving as facilitators. Student-faculty ratio is 10:1.

Introduction to Clinical Medicine is an annual subject given 6 hours a week for a total of 204 hours.

## **Medicine II (Problem Solving in Internal Medicine)**

The focus of teaching is on the following: a working knowledge of the natural history, clinical manifestations, diagnostic approach and principles of therapy of all diseases included in the list of minimum curricular requirements with emphasis on those commonly found in the Philippines. Knowledge acquired in Medicine I such as the problem oriented history taking, semiology, recognition and interpretation of clinical signs, education in the techniques of physical examination and the use of common medical instruments in clinical diagnosis are continued and reinforced. Satisfactory completion of Medicine I is a prerequisite to admission to the course.

Academic activities include 4 hours of lectures/seminars/case discussion and 6 hours of decury per week. Decury sessions are conducted in the hospital ward or outpatient service with the patient assignments for the student. Active participation of the student is a feature with the faculty serving as guide, facilitator and monitor of the students' performance. Student-faculty ratio is 10:1.

Students are provided a systematic exposure to the following subspecialties (Hematology and Oncology, Gastroenterology, Infectious Tropical Diseases, Rheumatology, Cardiology, Pulmonology, Endocrinology and Nephrology) by quarterly rotation. An integrated problem-solving approach to actual cases is emphasized, likewise developing the attitude of self-learning among students.

## **Medicine III (Clinical Clerkship in Internal Medicine)**

Clinical Clerkship is the third and final stage in the study of Medicine in the undergraduate curriculum. The activities include lectures, grand rounds, seminars and ward work through which the medical clerk is given maximal learning opportunities in the work-up and management of patients. They are required to be a part of a medical team serving patients from admission to discharge. They take histories, plan out a diagnostic and therapeutic regimen under the guidance of the medical intern, resident and consultant. As often as possible, they are given the opportunity to do diagnostic and therapeutic procedures under proper guidance. They are given training opportunities in decision-making. As part of their training in ambulatory medicine, they are given assignments in the emergency room and out-patient division.

## **DERMATOLOGY**

The course Dermatology 1, comprising 17 hours a semester, is included in the third year curriculum. It aims to impart to the students a basic knowledge of the most common skin diseases seen locally, through lectures and audio-visual correlation.

Clerkship in dermatology, a two-week rotation, is a formal exposure to patients seen at the Out-Patient Department and those admitted to the ward. Clerks participate in the evaluation and management of the OPD and ward cases with the teaching staff. Other activities lasting an hour each includes monthly basic and clinical science lecture and weekly Grand Rounds for the presentation of interesting cases, and Journal Club session. The clerks also assist during minor dermatological procedures done at the Out-Patient Department.

## **SURGERY**

### **Surgery I**

The aim of the course is to introduce to the students the basic principles of Surgery as a preparation for further studies in Clinical Surgery. It includes Principles of Surgery, Minor Surgery, and Basic Skills in Surgery.

The teaching-learning strategies are general lectures, small-group case discussions, and skills demonstrations and an Objective Structured Evaluation of must-know skills such as scrubbing, gowning, gloving, the use of surgical instruments and the performance of basic surgical procedures.

The course is offered to second year medical students in a semester, 6 hours a week for a total of 102 hours.

### **Surgery II**

This is a yearly subject designed to equip the students with the basic knowledge of Clinical Surgery that will serve as his foundation in future general practice. Such foundation not only includes theoretical knowledge but likewise dwell on ethical and practical applications relevant to the times and local situations.

The emphasis is on General Surgery, however, common problems encountered in other surgical specialties are also taken up. These are Urological Surgery, Orthopedic Surgery, Cardiovascular and Thoracic Surgery, Neurological Surgery, Pediatric Surgery, and Plastic and Reconstructive Surgery.

Aside from the lectures and small group discussions, the students begin to enjoy the exposure to surgical patients in the hospital for clinical correlation and as a preview to surgical clerkship.

This is a yearly course offered to third year medical students 6 ½ hours a week for a total of 260 hours.



## **Surgery III**

Clerkship in Surgery is a 2-month rotation in the Hospital where the fourth year students become part of the surgical team and personally handle patients. They learn to solve surgical problems, develop clinical judgment and perform psychomotor skills through guided and supervised patient care.

Integral to these is the Holistic approach to the patient whereby Compassion and Ethical behavior are emphasized. Conferences, Bedside Teaching, and Grand Rounds are activities where students can avail of the expertise and experience of the Consultant and Resident Staff.

The requirements in the rotation include passing the mini-revalida and the performance of identified basic surgical procedures.

## **ANESTHESIOLOGY**

Anesthesiology is taught to undergraduate medical students with the aim of providing a formal integrated program of instruction in Anesthesia and pain control, which they hopefully can apply later as doctors in regions where Anesthesiologists are non-existent.

Year I medical students learn basic principles of Anatomy, Physiology, Neuroanatomy and Biochemistry and integrate their knowledge with intubation, ventilation, resuscitation, peripheral nerve blocks for pain control and other forms of anesthetic management. Operational strategy is through integrated classroom didactic lectures included in the block system slots of Anatomy, Neuroanatomy, Physiology and Biochemistry departments.

Year II students learn the fundamental aspects of pain management, both acute and chronic. These include preoperative preparation, intraoperative and post operative pain control, general and regional anesthesia techniques, and pharmacology of intravenous, gaseous and volatile anesthetics, local anesthetics narcotics and non-narcotics drugs and other drugs used in anesthesia and pain control. Cancer and chronic non-cancer pain management, palliative care, life support and life saving measures are likewise included. These are done through interactive correlates, small group discussions and skills laboratory using phantoms and models given in the block system slots of Anesthesiology, Surgery and Pharmacology.

Year III and IV students gain knowledge and develop clinical competencies in pre-operative and intraoperative anesthetic management of patients. This is done through preceptorials, demonstration sessions and case discussions during conferences, given within the time frame of the block system allotted to Anesthesiology.

## **OBSTETRICS AND GYNECOLOGY**

### **Obstetrics I**

The course is offered for the study of normal Obstetrics. It encompasses the knowledge on basic anatomy and physiology of the reproductive tract; gametogenesis, placentation, fetal physiology, normal pregnancy, pre-natal care, labor, delivery and the puerperium.

The course makes use of lectures, case discussions and audio-visual sessions as methods of teaching.

The course is given to second year medical students for a total of 51 hours per semester.

## **Obstetrics II**

The subject concentrates on the Pathologic aspect of Obstetrics that includes abnormalities of pregnancy, labor and puerperium, their prevention; diagnosis, management, abnormalities in the newborn and their prevention; family planning, operative obstetrics, their techniques and indications.

The method of instruction is group discussion of cases given at the start of the semester. Supplemental lectures and demonstrations are conducted and augmented by audio-visual aids and special lectures on special topics.

This is a semestral subject given to third year medical students for a total of 51 hours per semester.

## **Gynecology**

The course is divided into sections which include anatomical defects of the female genital tract; disorders of pubertal development; inflammatory conditions; endocrinologic abnormalities; benign tumors of the genital tract; oncology; amenorrhea; infertility; and topics of special interest such as pelvic pain, cytology, genetics and human sexuality. The method of instruction is group discussion in the form of cases with some didactic lecture.

The subject is given to third year medical students for a total of 51 hours per semester.

## **Obstetrics Clerkship**

Clinical Clerkship in Obstetrics provides the students actual experiences and the practical application of the principles of Obstetrics. Consultants and the resident staff teach and guide them in assisting all procedures performed within the limit of the specialty. Procedures such as normal spontaneous delivery, episiotomy and repair, forceps extraction, curettage, caesarian section including total patient care are instructed and properly supervised. Activities in the service include teaching rounds with the consultants and resident staff, admitting and pre/post operative conferences with the Chairman and Chief of Section, mannequin demonstrations, seminars and journal reports, audio-visuals and pathology slide conference and out-patient follow ups.

This is a 45 days rotation in the Department of Obstetrics both at the pay and clinical divisions of the hospital, and at the Fabella Hospital.

## **Gynecology Clerkship**

Clinical Clerkship in Gynecology provides the students experiences in practical application of principles learned in didactic Gynecology. Training and guidance are provided to the students by the consultant and resident staff in these areas. Diagnostic procedures, management planning, Gynecology pathology review, problem-oriented recording, patient follow-up care, community involvement and interpersonal skills are emphasized.

This is a 15 day rotation divided into conferences, ward rounds, 24-hour duties and out-patient services so that the student may attain the various goals of his Gynecology Clerkship.

## **PSYCHIATRY**

### **Behavioral Medicine I**

This course focuses on the study of personality in all its aspects specifically on:

- a) human development throughout the life cycle and the effects of the biopsychosocial factors in shaping personality;
- b) the neuroanatomic and neurophysiologic basis of behavior;
- c) the psychodynamic concepts related to the development of the psyche.

This course is given to second year medical students one hour a week for one semester or a total of 17 hours.

### **Behavioral Medicine II**

The course deals with the study of the causes of mental illness and the various mental mechanisms utilized by the individual against anxiety. Emphasis is given to the psychopathological signs and symptoms of the different psychiatric disorders.

Clinical examination of psychiatric patients puts a great deal of emphasis on interviewing techniques, history-taking and mental status examination. Finally, the student is introduced to the various diagnostic and ancillary tests used in psychiatry.

### **Behavioral Medicine III**

The course is designed for the students to attain understanding of various clinical syndromes, ranging from mental retardation, acute and chronic brain syndromes, personality disorders, psychophysiologic autonomic nervous system disorders to the neuroses and functional psychoses. Various methods of management therapy are discussed not only in their principles but in their actual application. Emphasis is given to the role of Psychiatry in the various branches of medical disciplines such as Internal Medicine, Surgery, OB-Gyne, Pediatrics, EENT, etc. Forensic Psychiatry and Community are also studied. The DSM III Classification is adopted.

The course is given to third year students for a total of 17 teaching hours.

## **Clinical Clerkship in Behavioral Medicine**

Clinical clerks spend the whole day in the ward taking history, doing physical and psychiatric examinations of the patients, interviewing relatives concerned and participating in the actual treatment of patients under the guidance of both the attending and the resident physician.

Clinical clerks are assigned to the Psychiatry Ward for a total of 7 days or 60 hours.

## **NEUROLOGY**

### **Basic Neuroscience I**

The course enables the students to gain knowledge in the developmental and functional approaches to morphology of the nervous system in correlation with clinical neurology, neuro-radiology, neuropathology and neuro-psychiatry. Lecture-projection, live video demonstration and discussion sessions alternating with the study of specimens of different sections of the brain and spinal cord comprise the main instructional strategy. Integrated case discussion including neuroanatomic learning issues enable students to apply knowledge in basic sciences to clinical material.

The course is included in the first year curriculum for a total of 68 hours per year.

### **Basic Neuroscience II**

The subject aims to provide the students a smooth transition from the basic sciences (Neuroanatomy, Histology, Physiology and Biochemistry) to the clinical subjects. It introduces the students to the basic concepts of Neurology and Psychiatry in health and disease. Focus is on the pathophysiology, biochemical and morphological changes in the diseases of the Nervous System. The essentials of a thorough neurological evaluation and a systematic psychiatric interview and mental status examination are emphasized.

The course is given to second year medical students for a total of 17 hours for one semester.

### **Clinical Neurology**

The course emphasizes common neurological diseases such as cerebrovascular accidents, convulsive disorders, hereditary degenerative diseases, toxic and metabolic disorders. Focus is also given to Tropical Neurology.

Actual ward cases are illustrated and discussed. Ancillary diagnostic aids and the therapy of neurological disease are also discussed.

The course is offered to third year medical students for a total of 51 hours per academic semester.

## **Clinical Clerkship in Neurosciences**

Clinical clerks are given the opportunity for actual patient care in the ward under the guidance of Consultants, Residents and Interns working as a team. Theoretical neurology is thus translated into actual application.

Clinical clerks participate in all teaching sessions of the Department of Neurology and Psychiatry. On Mondays, they discuss the problem-solving approach in Neurology; on Thursdays, they attend the Psychiatric Team Conferences; and on Fridays, they participate in a multidisciplinary approach during the Neurology-Neurosurgery-Pediatrics Seminars or Grand Rounds. A clinico-pathologic correlation during brain-cutting sessions is held every Wednesday.

Clerks are assigned to the Neurology Ward for 7 days for a total of 60 hours of ward work, conferences, seminars and patient care.

## **OTORHINOLARYNGOLOGY**

The course offers fundamental and practical information on the diagnosis and treatment of common ear, nose and throat disorders. Other related topics like maxillo-facial trauma, neoplastic diseases of the head and neck, reconstructive surgery and diseases of the aerodigestive tract are included. New developments in hearing disorders, rhinology, laryngology and bronchoesophagology form part of the subject matter.

Teaching strategies include lectures, case presentations and skills laboratory are scheduled one hour per session during Mondays and Wednesdays.

## **OPHTHALMOLOGY**

The main objective of the core curriculum for third year medical students is to provide a comprehensive understanding of the basic principles in ophthalmology. Fundamental knowledge of the anatomy and physiology of the eye as well as the principles of diagnosis and management of ocular disorders will be provided by means of lectures, case presentations and discussions. Likewise, the students will also be exposed to different diagnostic equipments and procedures at the UST Eye Center. Assessment of each student will be in the form of written as well as oral examinations. A total of 51 hours will be allotted for the program.

Medical clerkship in ophthalmology will not only provide a review of the basic principles in ophthalmology but exposes the student to clinical cases and offers active participation in examination, diagnosis and management of ocular disorders in the out-patient department. Similarly, students will be trained to do fundamental procedural skills and will also be exposed to surgical management of ocular disorders at the UST Eye Center. Clerkship in Ophthalmology is given for the duration of 7 days. Assessment of each student will be in the form of written, oral and practical examinations.

## **RADIOLOGY**

The objective of the course is to offer basic knowledge of Radiology and its sub-specialties and to help students learn the judicious use of diagnostic imaging in clinical medicine. Special emphasis is placed on commonly encountered diseases in the local setting.

The course consists of general lectures, classroom group discussions, case presentation sessions, and an exhibit of clinical images. It is presented in 7 modules integrating the different sub-specialties in Radiology: Principles and Techniques; Chest; Abdomen; Gastrointestinal Tract, Retroperitoneum, Genitourinary Tract, Neuroradiology, Musculoskeletal System, and special lectures (Pediatric Radiology, Breast, Radiation Oncology and Nuclear Medicine).

## **PREVENTIVE MEDICINE**

### **Preventive, Family and Community Medicine I**

The freshmen course aims to make the students understand the factors involved in health promotion (health education, disease prevention and health protection) in context of the individual, family unit and the community at large.

- a) FAMILY and COMMUNITY HEALTH I focuses on the family unit as a very important resource in health promotion with emphasis on disease prevention and health maintenance. Wellness achieved through health education is an integral part of the module.
- b) EPIDEMIOLOGY and POPULATION DYNAMICS present the basic concepts and principles on the prevention and control of communicable and degenerative diseases and the effects of uncontrolled or unregulated population on the state of health and disease.
- c) HEALTH STATISTICS discusses the collection, organization, presentation and analysis of statistical data pertaining to health and disease and the role of descriptive and inferential statistics in research.
- d) RESEARCH I handles generalities in doing clinical research and its role and relevance in better health care provision and clinical practice.

Teaching strategies consist of lectures and correlates, small group discussions and tutorials, skills laboratories and workshops.

The course is given to first year medical students, three hours a week for one semester for a total of 51 hours.

### **Preventive, Family and Community Medicine II**

The sophomore course includes the following modules:

- a) FAMILY and COMMUNITY HEALTH II focuses on the community as a very important resource in health promotion with emphasis on disease prevention and health maintenance. Community health development and community diagnosis is an integral part of the module.
- b) RESEARCH II (EVIDENCE-BASED MEDICINE and CRITICAL APPRAISAL). The students will be introduced to the concepts of evidence-based medicine with application of principles through critical appraisal of scientific literature and clinical practice guidelines.
- c) OCCUPATIONAL HEALTH involves discussion by the faculty and students of health and safety issues in the work place and industries, including prevention and control of industrial hazards.

In addition, MEDICAL SOCIOLOGY involves the study of Filipino family beliefs, customs and practices and how they affect individuals and communities with accent on sociology of medical practice.

d) HUMAN ECOLOGY and ENVIRONMENTAL SANITATION present the environment, physical, biological and socio-economic factors that affect health and disease with coverage on control of environmental factors such as water, sewage, insects and rodents responsible for disease transmission.

Teaching strategies consist of lectures and correlates, small group discussions and tutorials, skills laboratories and workshops, individual work and group presentations.

The course is given to second year medical students two hours a week for one semester for a total of 34 hours.

### **Preventive, Family and Community Medicine III**

The third-year course aims to impart knowledge to students, reinforce their skills and develop the right attitude towards health issues in the following areas:

- a) FAMILY and COMMUNITY HEALTH III focuses on the concepts and impact of illness on individuals, families and communities. The biopsychosocial approach principles and concepts are reviewed and applied in this module. Likewise, traditional, alternative and integrative medicine approaches are explored.
- b) PUBLIC HEALTH ADMINISTRATION presents the principle of organization/management in health settings, health care delivery systems, key health legislations and rules and regulations that are important for future medical practice. The national health situation is highlighted as well.
- c) APPLIED EPIDEMIOLOGY deals with the practical application of principles and concepts in prevention and control of endemic and prevalent communicable diseases and degenerative or lifestyle diseases.

Teaching strategies consist of lecture-discussion, field visits, seminar-workshops, individual work and group presentations.

The course is given to third year medical students, three hours a week for one semester for a total of 51 hours.

### **Preventive, Family and Community Medicine IV**

#### **(Clinical Clerkship in Preventive, Family and Community Medicine)**

The medical senior realizes the importance of the family, the immediate environment and the community as they affect people in health and disease. He takes on the different roles of the 5-star physician: Educator, Healer, Administrator/Leader, Social Mobilizer and Researcher. This four (4) weeks rotation aims to develop in medical seniors the competence required for health management in a primary care setting: community diagnosis; health program prioritization, planning, and implementation; health activity evaluation and monitoring. Medical seniors do actual community work that is related to the implementation of public health programs through Primary Health Care approaches. Their regular activities include: health education and training; service provision including primary care clinics; vaccination/immunization; nutrition and weight management; family and home visitations; and research.

The St. Martin de Porres Community Socio-Medical Center (SMPCSMC) in Sapang Palay, San Jose del Monte City, Bulacan serves as the training center for the Medical Seniors. For four weeks, they implement designed health programs, do case-findings and follow-up visits, and man established satellite clinics, which are located strategically in the different districts. Among the worthwhile activities that the Center as a Non-Governmental Agency (NGO) offers in coordination with the Local Government Health Office and the Department of Health (DOH) are: Instruction-Education-Communication (IEC) campaigns; Expanded Program on Immunization (EPI) implementations; Maternal and Child Health (MCH) services; Nutrition programs; and TB Control through DOTS.

One week urban community medicine exposure integrated into the rotation provide opportunities for the medical seniors to fully understand the health care delivery in context of the Philippine setting. Activities include: educational trips and stay at government agencies (DOH, Philhealth, and a Barangay Health Center under the Manila City Health Office); NGO facilities (Golden Acres, Alay Kapwa Foundation, Inc.); processing of insights and experiences through small group discussions; individual and group critical appraisal of community based trials.

Trainees also participate on a voluntary basis in various activities lined-up by the University Community Development Office for urban and rural areas done in close coordination with the different colleges and faculties of the University. Ongoing and finished programs include: HASIK I in Tondo, Manila, HASIK II in Sampaloc, Manila, HASIK III in Sitio Layak, Tarlac and HASIK IV in Sitio Malasa, Tarlac. Participation of the Department in the university-wide project comes in terms of services or manpower in health care and information dissemination campaigns.

A weekly Primary Care Grandrounds participated by the Department faculty, medical seniors and trainees, allow full discussion of selected cases through a biopsychosocial approach – integration of the clinical, behavioral and social sciences.

An end of rotation group accomplishment report and Ulat sa Barangay, by the Department faculty, medical seniors, trainees, community populace, and local government health unit representatives allow full discussion of implemented programs through an interactive strategy-presentations and feedback.

### **Family Medicine (Electives)**

The Family Medicine rotation through its Family Health Care Program (FHCP) offers a traditional family practice of caring for patients and their families over a period of time, both in sickness and in health, in a comprehensive and personalized manner.

The course addresses the human dimension of the patient-physician-family relationship, which is essential to a future physician's education. It aims to develop a complete physician with greater social awareness and competency in primary care: a health educator, a researcher, and an administrator. Its emphasis is on family dynamics, family life cycle, impact of illness on the family, tools for family assessment and doctor-patient relationship. It utilizes lectures, case discussion and role-playing as teaching strategies. A Family Case Presentation serves as the culminating activity of their rotation.

This is a one-week module given to interested medical seniors under the elective rotation choices.



## **CLINICAL EPIDEMIOLOGY**

This course offers the proper knowledge and tools for an emerging approach to medical management-Evidence Based Medicine (EBM). Corollary to this is a formal education in research so that future endeavors in this field, as demanded by most advanced stages in medical schooling and post graduate training, will be scientifically sound and, data generated by such are highly significant in current management of patients. In so doing, the Faculty of Medicine and Surgery confirms its commitment to research activities, formally allocating assistance, resources and time exclusively for research.

The program involves all four (4) years of medical education. Students will have formal classroom lectures and teaching on research methodology, medical informatics, critical appraisal of medical literature and evidence-based medicine in the first two school years. Periodic evaluation of knowledge acquisition and progress is done and a required terminal output of a valid research protocol/proposal for Research Methodology and, properly appraised medical literatures in the four primary medical studies (diagnosis, therapy, harm and prognosis) for Critical Appraisal and Evidence-based Medicine. Separate consultation/research laboratory hours will be allotted during the whole course for: development, presentation, improvement and evaluation of research proposals in the 1st year; research data gathering, encoding and analysis in the 2nd and 3rd years; and research paper writing and presentation in the 4th year.

## **REHABILITATION MEDICINE**

The course aims to make the students know the role of rehabilitation medicine in the comprehensive management of patients with neuromuscular, musculo-skeletal, and cardiopulmonary dysfunction both in acute and chronic stage of impairment. The students are trained to be able to conduct a comprehensive evaluation of the functional level and capacity of patients with disabilities; recognize the physical, psychological, social and emotional factors comprising the "Syndrome" of the disabled patients: know the various modalities and assistive appliances employed in the management of rehabilitative conditions; and outline the basic needs of patients with disabilities.

Teaching strategies consist of formal lectures, demonstrations and discussions with audiovisual aid. The course is given to third year medical students two hours a week for one quarter or a total of 17 hours per quarter.

### **Clinical Clerkship in Rehabilitation Medicine**

Clinical Clerkship rotation in the Rehabilitation Ward aims to make the medical seniors participate in ward rounds, take care of assigned rehabilitation medicine patients, accomplished histories and physical examination and discharge summaries, evaluate functional status, outline rehabilitation programs, follow-up work ups, attend clinical lectures and grand rounds, and participate in the Journal Club. The course is given during a one week rotation.

## **MEDICAL NUTRITION**

The course aims to provide knowledge on the use of diet as an adjuvant therapeutic agent for earlier recovery of patients. Basic principles in diet therapy, dietary prescription writing, routine hospital and therapeutic diets for specific diseases are emphasized.

The course is taught through lectures and is given to the third year medical students one hour a week for one year. Subjects matters covered coincide with the different modules taken in Internal Medicine, Surgery and Pediatrics (GI/Oncology Module, Pulmonary/Endocrine Module, Cardiology/Renal Module and Rheumatology/Infectious Diseases Module).

## **BIOMEDICAL ETHICS**

The course in Bioethics is designed to make the students sensitive to ethical problems in biomedical practice. It stimulates them as future physicians to develop mature moral reasoning and to act in accordance with principled moral judgment thereby developing the attitude of a competent and compassionate Catholic physician.

At the end of the program, the student should be able to identify and define the major bioethical concepts and principles; consistently apply these concepts in the analysis of bioethical problems; act in accordance with his moral judgment; demonstrate special solicitude to the sick and the poor and manifest justice and charity towards his colleagues, co-workers, patients and their families.

Teaching strategy consists of lectures, group discussions, seminars, role-playing, conferences with audio-visual aids, and other instructional devices.

### **Bioethics I: Basic Principles and Attitudes**

Bioethics I focuses on bioethical principles, basic human attitudes and virtues, the ethics of human life, the ethics of sex and love, the Hippocratic Oath, medical codes of ethics, and the ethical code of Catholic Physicians.

This course is given to first year medical students two hours a week for one semester or a total of 34 hours.

### **Bioethics II: Healing and Caring for Patients**

Bioethics II deals with healing and caring for patients. Ethical issues in the beginning of life which include contraception, sterilization, abortion, responsible motherhood, natural regulation of birth and reproductive technologies (e.g. in vitro fertilization and embryo transfer, artificial insemination, surrogate motherhood and cloning). Other difficult issues on death and dying, organ transplants and justice in the allocation of scarce resources, the human genome project, genetic manipulation, genetic engineering, pre-natal testing, genetic counseling and embryonic stem cell research are discussed.

This course is given to second year medical students two hours a week for one semester or a total of 34 hours.

### **Bioethics III: The Physician's Relationship**

Bioethics III takes up the following relationships: physician and patient; physician-society; physician-physician; physician-nurse; physician-student; and above all, physician-patient relationship. It also focuses on rights of patients, human rights, bioethics committees and the role of physician in advocacy.

This course is given to third year medical students two hours a week for one semester or a total of 34 hours.

## **Bioethics IV: Clinical-Moral Cases**

Fourth year students, or Medical Clerks, present clinical cases and analyze them from a medical and ethical perspective with the assistance of the teaching staff of the Department of Bioethics and some noted resource persons.

### **LEGAL MEDICINE**

The course deals with the study of the medical aspects of law and legal aspects of medicine. It is given 3 hours a week for one semester for a total of 51 hours.

The terms forensic medicine and medical jurisprudence are often employed as synonymous. This practice has the sanction of long usage. However, these terms denote essentially different subjects that are closely related.

Forensic or legal medicine is concerned with the application of medical and paramedical scientific knowledge to certain branches of law, both civil and criminal. Its aim is to aid the administration of justice by correlating such knowledge and applying it to the purpose of law. Medical jurisprudence on the other hand denotes knowledge of law in relation to the practice of medicine. The subject deals with those relations which are generally recognized as having legal consequences. It is primarily concerned with legal rights and responsibilities of medical practitioners with particular reference to those arising from the doctor-patient relationship. It is advantageous for a medical practitioner to have acquaintance with the manner in which he may come in contact with the legal authorities and to have some knowledge of the legal procedure.

Forensic medicine is one of the most fascinating of all facets of the practice of medicine. It deals with topics such as injuries, assaults, poisoning, suspected criminal offenses, unnatural deaths and health laws. It is in great part an exercise in the study of other branches of medicine but viewed from a different angle. It assumes a medical practitioner's knowledge of medical or scientific matters. The doctor or the scientist who by his practice holds himself out to be proficient in the field is liable to be called upon to render professional assistance of the most varied character in medico legal cases which may later compel his attendance at court. It is imperative therefore, that he should be well informed and alert to his medico-legal responsibilities, so as to discharge his duties in partnership with the law to the credit of his profession.

### **DEPARTMENT OF MEDICAL EDUCATION**

The Department of Medical Education was organized in 1983 initially as the Committee of Medical Education in order to improve the curriculum. The following year it was created as a department. The Department is headed by a Chair and its members consist of faculty from different academic departments as approved by the Dean.

Its task is to oversee a relevant and updated undergraduate curriculum for the Faculty of Medicine and Surgery. Where necessary, it may search for, evaluate, propose, cause and coordinate the implementation of modifications and changes in the curriculum consistent with the mission and vision of the University medical school and where such modification will benefit the medical school's graduates and prepare them for competent medical practice. Its concerns include not only monitoring of the curriculum content, teaching strategies and evaluation processes but also of faculty development programs. The department sets the guidelines on student promotion and administers the comprehensive examinations to all medical students, the Written Revalida to clerks, and the Medical Board Review Course. It also coordinates the clinical training and rotation of medical clerks and supervises the Oral Revalida in coordination with the Director of Clinical Programs.

## **JUNIOR INTERNSHIP PROGRAM**

### **1. GENERAL DESCRIPTION**

- 1.1 Under Republic Act 5956, Clinical Clerkship is the final year of the medical student in the Faculty of Medicine and Surgery.
- 1.2 Clinical Clerkship in the UST Faculty of Medicine and Surgery covers a period of twelve (12) months carried out in the different services of the Santo Tomas University Hospital with rotations to San Lazaro Hospital, the National Bureau of Investigation (NBI) Crime Laboratory, Dr. Jose Fabella Medical Center, and the Community Medicine Project in Dagat-dagatan and in special cases in hospitals outside the Philippines.
- 1.3 Clinical Clerkship in the UST Faculty of Medicine and Surgery is handled by a specific group of staff members assigned by the departments and approved by the Dean.
- 1.4 The objective of the Clinical Clerkship Program is carried out by these staff assisted by the residents in the different divisions of the Santo Tomas University Hospital.
- 1.5 The Program is designed to train the students for general practice. It is accomplished by actual clinical and didactic sessions.

### **2. REQUIREMENTS FOR CLINICAL CLERKSHIP**

- 2.1 Satisfactory completion of the previous three (3) years in the medical course under the present curriculum of the UST Faculty of Medicine and Surgery.

### **3. FEATURES OF THE CLINICAL CLERKSHIP PROGRAM**

- 3.1 The Clinical Clerkship Program utilizes the facilities of the Santo Tomas University Hospital with rotations to San Lazaro Hospital, Dr. Jose Fabella Medical Center, National Bureau of Investigation Crime Laboratory, St. Martin de Porres Community Center in Sapang Palay, Bulacan and selected hospitals outside the Philippines.
- 3.2 Assignments and rotations in the various departments and services are arranged in order to provide the clinical clerk the opportunity to observe and participate in the total care of the patients. All clinical clerks must rotate (mandatory) in the following services:

- Medicine	8 weeks
- Surgery	8 weeks
- Pediatrics	8 weeks
- Obstetrics/Gynecology (including Fabella)	8 weeks
- Community Medicine	4 weeks
- Dermatology	2 weeks
- Infectious Diseases (San Lazaro)	1 week
- Legal Medicine	1 week
- Ophthalmology	1 week
- Otorhinolaryngology	1 week
- Radiology	1 week
- Neurology/Psychiatry	2 weeks

They may choose any of the following for their elective rotations for a total of 3 weeks:

- Anesthesia	2 weeks
- Family Medicine	1 week
- Rehabilitation Medicine	1 week
- Medicine	2 weeks
- Surgery	1 or 2 weeks
- Psychiatry	1 or 2 weeks
- Neurology	1 or 2 weeks
- Ophthalmology	1 or 2 weeks

- 1.1 The educational program of the Clinical Clerk consists of bedside teaching, clinical conferences and scientific project studies. For details, refer to department activities and schedule of conferences.
- 1.2 The UST Faculty of Medicine and Surgery Clinical Program Office accepts foreign medical students who wish to take elective rotation in our institution. The requirements are:
  - 1.2.1 Official documents from foreign school – such as Dean’s approval to take elective studies abroad
  - 1.2.2 Transcript of records with school’s seal
  - 1.2.3 Documents including student’s study permit that will be required by the Philippine Embassy for staying in the Philippines
  - 1.2.4 Affidavit of support from parents
  - 1.2.5 Payment of tuition fees for the period of stay in the University
  - 1.2.6 Filling up of forms as required by UST Registrar’s Office which will be provided upon arrival
  - 1.2.7 Medical Insurance
- 1.3 UST Faculty of Medicine and Surgery Clinical Programs Office also allows UST medical students to take Clerkship rotations outside the Philippines.
  - 1.3.1 Requirements of the UST Faculty of Medicine and Surgery for Clerkship rotations outside the Philippines:
    - 1.3.1.1 Satisfactory completion of the 3-year basic courses (no failure in any subject).
    - 1.3.1.2 A general weighted average of at least 2.50 in the 3-year basic courses.
    - 1.3.1.3 Duly matriculated student of UST Faculty of Medicine and Surgery (Clerkship tuition for the entire year).
    - 1.3.1.4 Letter of intent for the UST medical student.
    - 1.3.1.5 Approval by the Director of Clinical Clerkship and by the Office of the Dean.
    - 1.3.1.6 Letter of acceptance from the Medical Director/Dean of the teaching university hospital in the U.S.

1.1.1.1 Submission of evaluation reports on the service rotation taken in the U.S. based hospital.

1.1.1.2 Upon submission of the evaluation reports to the Clinical Clerkship Program, the student's documents will be forwarded to the Office of the Dean and the Office of the Registrar for approval.

1.1.1.3 Health and Malpractice Insurance.

## **CLERKSHIP ROTATIONS**

### **MEDICINE**

Duration: 8 weeks (Mandatory)/ 2 weeks (Elective)

Clinical clerkship is the final stage in the study of Medicine in the undergraduate curriculum. The activities include lectures, grand rounds, seminars and ward work through which the medical clerk is given maximal learning opportunities in the work-up and management of patients. They are required to be a part of a medical team serving patients from admission to discharge. They take histories, plan out a diagnostic and therapeutic regimen under the guidance of the medical intern, resident and consultant. As often as possible, they are given the opportunity to do diagnostic and therapeutic procedures under proper guidance. They are given training opportunities in decision-making. As part of their training in ambulatory medicine, they are given assignments in the emergency room and out-patient division.

### **SURGERY**

Duration: 8 weeks (Mandatory)/ 1 or 2 weeks (Elective)

Clerkship in Surgery is patient-oriented. It aims to train apprentices in surgery learn how to solve surgical problems as they add to their basic knowledge, develop clinical judgment and perform skills through guided and supervised patient care.

The course trains the students on how to gather information using a systematic methodology towards intelligent diagnosis. It introduces the students to current ancillary diagnostic studies utilized in the practice of surgery as well as instructs them on logical, scientific and moral approaches to problem-solving in the specialty as junior members of the surgical team.

Conferences, bedside rounds and grand rounds form an integral part of the course making the expertise and experience of consultants in the surgical staff available to the student

### **PEDIATRICS**

Duration: 8 weeks (Mandatory)

Clerkship in the Department of Pediatrics provides clinical training in newborn care, ambulatory pediatrics and emergency room management. Clerks are assigned patients in the In-and-Out patient services (Well-Child and Sick-Child Clinics). They participate in the diagnostic work-up and management of the cases. Bedside teaching is provided for by assigned faculty members and house staff. Attending staff teaching rounds are conducted several times weekly. Out-patient rotation includes a visit to the local Health Center where they are exposed to government health services. In Ambulatory Pediatrics, emphasis is on Preventive Pediatric health care to include: developmental/behavioral assessment, sensory screening and screening for TB, anticipatory guidance and dental referral. Clerks attend and participate in all regularly scheduled departmental teaching/training activities. Teaching sessions are conducted in pediatric radiology, pediatric emergencies and some microbiology/parasitology techniques. The undergraduate pediatric curriculum is competency-based.

## **OBSTETRICS**

Duration: 6 weeks (Mandatory)

Clinical Clerkship in Obstetrics affords the students actual experiences and the practical application of the principles in Obstetrics. Consultants and the resident staff teach and guide them in assisting all procedures performed within the limit of the specialty. Procedures such as normal spontaneous delivery, episiotomy and repair, forceps extraction, curettage, cesarean section including total patient care are instructed and properly supervised. Activities in the service include teaching rounds with the consultants and resident staff, admitting and pre/post operative conferences with the Chairman and Chief of section, mannequin demonstrations, seminars and journal reports, audio-visuals and pathology slide conference and out-patient follow ups.

## **GYNECOLOGY**

Duration: 2 weeks (Mandatory)

Clinical Clerkship in Gynecology provides the students experiences in practical application of principles learned in didactic Gynecology. Training and guidance are provided to the students by the consultant and resident staff in these areas: Diagnostic Procedures, Management Planning, Gynecology Pathology Review, Problem-oriented Recording, Patient Follow-up Care, Community Involvement and Interpersonal skills. The rotation is divided into conferences, ward rounds, 24-hour duties and out-patient services so that the student may attain the various goals of his Gynecology Clerkship.

## **COMMUNITY MEDICINE**

Duration: 4 weeks (Mandatory)

This aims to develop in the medical students (4th year clinical clerks) competence in identifying health problems, planning of programs and activities as well as evaluating the health status of the community. Students do actual community work that are related to the implementation of public health programs through Primary Health Care approach. The regular health program of the students consists of health service, immunization, nutrition, research and education.

The Community Medicine Program of the UST Faculty of Medicine and Surgery is located at Barangay North Bay Boulevard (Southside NBBS) in Lapu-Lapu and Bangus Streets, Kaunlaran Village in Navotas City. It is situated near the San Lorenzo Ruiz Parish Church with Barangays Lichangco and Bangkolasi as adjacent communities.

Medical Clerks also participate on a voluntary basis in the project “HASIK”, the University Community Service Program for urban and rural areas which is in coordination with the different colleges of the University. HASIK I is in Tondo, Manila, HASIK II in Sampaloc, Manila, HASIK III in Sitio Layak, Tarlac and HASIK IV in Sitio Malasa, Tarlac. Participation of the faculty staff in this university-wide project in terms of services or manpower in health care and information dissemination campaigns is done together with the other colleges such as Pharmacy, Science, Nursing, and Institute of Physical Therapy.

Of recent addition to the Clerkship activity is the regular monthly Primary Health Care ground rounds which is participated in by the Consultants, Residents, Medical Interns and Medical Clerks.

### **ANESTHESIOLOGY**

Duration: 2 weeks (Elective)

Year IV students gain knowledge and develop clinical competencies in pre-operative, intraoperative and post operative anesthetic management of patients. This is done through preceptorials, demonstration sessions and case discussions during conferences, given within the time frame of the block system allotted to Anesthesiology.

### **DERMATOLOGY**

Duration: 2 weeks (Mandatory)

Clerkship in Dermatology, a two-week rotation, is formal exposure to patients seen at the Out-Patient Department and those admitted to the ward. Clerks participate in the evaluation and management of the OPD and ward cases with the teaching staff. Other activities lasting an hour each include monthly basic and clinical science lecture, Grand Rounds for the presentation of interesting cases, and Journal Club sessions. In addition, one hour per day is devoted to audio-visual review at the Learning Resources Unit. The clerks also assist at minor dermatological procedures done at the Out-Patient Department.

### **FAMILY MEDICINE**

Duration: 1 week (Elective)

The Family Medicine rotation through its Family Health Care Program (FHCP) offers a traditional family practice of caring for patients and their families over a period of time, both in sickness and in health, in a comprehensive and personalized manner.

The course addresses the human dimension of the patient-physician-family relationship, which is essential to a future physician's education. It aims to develop a complete physician with greater social awareness and competency in primary care: a health educator, a researcher, and an administrator. Its emphasis is on family dynamics, family life cycle, impact of illness on the family, tools for family assessment and doctor-patient relationship. It utilizes lectures, case discussion and role-playing as teaching strategies. A Family Case Presentation serves as the culminating activity of their rotation.

This is a one-week module given to interested medical seniors under the elective rotation choices.



## **LEGAL MEDICINE**

Duration: 1 week (Mandatory)

The objective of Medico-legal clerkship is to conduct proper medico-legal appraisal of the patient to systematically acquire medico-legal facts and arrange the same in logical order to easily elucidate legal problems during testimony in the court of law.

The clinical exposure is carried out in three (3) areas: clinical evaluation of all Medico-legal cases, autopsy, and court duties. This mandatory rotation is for a one-week period.

## **NEUROLOGY**

Duration: 1 week (Mandatory)

Clinical clerks are given the opportunity for actual patient care in the ward under the guidance of Consultants, Residents and Interns working as a team. Theoretical neurology is thus translated into actual application.

Clinical clerks participate in all teaching sessions of the Department of Neurology and Psychiatry. On Mondays, they discuss the problem-solving approach in Neurology; on Thursdays, they attend the Psychiatric Team Conferences; and on Fridays, they participate in a multidisciplinary approach during the Neurology-Neurosurgery-Pediatrics Seminars or Grand Rounds. A clinico-pathologic correlation during brain-cutting sessions is held every Wednesday.

Clerks are assigned to the Neurology Ward for 7 days for a total of 60 hours of ward work, conferences, seminars and patient care.

## **OPHTHALMOLOGY**

Duration: 1 week (Mandatory)/ 1 or 2 weeks (Elective)

Clerkship in Ophthalmology exposes the clinical clerks to examination and work-up of cases and participation in the operation and post-operative management of eye cases done under the close supervision of Consultants and Residents in the Out-Patient Department and the Eye Center of the Hospital.

This is given to fourth year medical students, during their rotation in the Department for one week.

## **OTORHINOLARYNGOLOGY**

Duration: 1 week (Mandatory)

Otorhinolaryngology rotation is an elective one-week rotation with the objective of instructing medical clerks on the basic knowledge of the specialty, including common diseases, arrival at the correct diagnosis and the corresponding management. Clerks will be trained on the skills of otorhinolaryngologic history taking and the proper technique of physical examination of the ears, nose, throat, head and neck areas. They will also perform proper diagnostic procedures such as anterior rhinoscopy, posterior rhinoscopy, indirect laryngoscopy and otoscopy.

## **PSYCHIATRY**

Duration: 1 week (Mandatory)/ 1 or 2 weeks (Elective)

Clinical clerks spend the whole day in the ward taking history, doing physical and psychiatric examinations of the patients, interviewing relatives concerned and participating in the actual treatment of patients under the guidance of both the attending and the resident physician.

Clinical clerks are assigned to the Psychiatric Ward for a total of 7 days or 60 hours.

## **RADIOLOGY**

Duration: 1 week (Mandatory)

Clerkship in Radiology consists of a one week rotation in the Division of Radiological Science. Clerks are required to take the pertinent history and clinical data of each patient in relation to the procedures requested, formulate their own clinical impression of the case, and correlate them with the radiographic findings.

The clerks will observe how the different radiographic procedures are being done. These will mainly include plain film studies, contrast studies and ultrasound. In the process, they will be taught the indications and contraindications of such procedures, and the proper patient preparation.

Lectures by the resident and consultant staff will be given. They will be required to attend conferences in Radiology and give reports on assigned topics.

## **REHABILITATION MEDICINE**

Duration: 1 week (Elective)

Clinical Clerkship rotation in the Rehabilitation Medicine aims to make the medical seniors participate in ward rounds, take care of assigned rehabilitation medicine patients, accomplish histories and physical examination and discharge summaries, evaluate functional status, outline rehabilitation programs, follow-up workups, attend clinical lectures and grand rounds, and participate in the Journal Club.

**FACULTY OF MEDICINE AND SURGERY**  
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TIM S. TRINIDAD, M.D.

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Chiong, Mary Anne D.  
Gimenez, Ernesto  
Lomibao, Florante B.  
Maglinao, Maria Lourdes D.  
Montenegro, Renato R.  
Paulino, Aliw  
Rondaris, Ma. Victoria C.  
Sua, Alex S.  
Uy, Roberto N.



**Instructors:**

Alcid, Gerald T.  
Alejandro, Inocencio P.  
Ampil, Encarnita  
Aycardo, Svetlana Maris O.  
Bernal, Christine B.  
Borromeo, Joey D.  
Calma, Clevelinda  
Castro, Bu  
Chan, Robert Y.  
Cunanan, Elaine C.  
Dela Rosa, Rolan R.  
Dy, Frederick  
Fortuna, Ma. Clarissa S.  
Gellaco, Ma. Margarita Leticia D.  
Ho, Jean U.  
Julian, Jommel C.  
Laguesma, Romina Jasmin P.  
Letran, Jason L  
Lim, Edgar  
Lim, Ida Marie T  
Lim, Karissa  
Llauderres, Wenceslao S.  
Macapagal, Grace A.  
Macaraig, Catherine Q.  
Marcelo, Ma. Cecilia T.  
Monreal, Portia Menelia D.  
Morales, Karl  
Natividad, Porshia C.  
Navarro, Marie Stella L.  
Oropilla, Angelie Eristela L.  
Panaligan, Mario M.  
Pe, Dexter Clifton C.  
Perez de Tagle, Juan Ramon  
Purino, Pio Jr. V.  
Ramirez, Marcellus Francis L.  
Ramos, Hubert D.C.  
Regala, Eugenio Emmanuel V.  
Reyes, Carmela  
Santos, Alita B.  
Santos, Ma. Lourdes E.  
Solis, Orestes E.  
Valencia, Maria Antonia Aurora  
Visperas, Julie Christie G.

**Honorary Professors:**

Forres H. Adams, M.D.  
Rene Arcilla, M.D.  
Cristobal Martinez Bordiu, M.D.  
Agustin Castellanos, Sr., M.D.  
Ramon Castroviejo, M.D.  
Eliot Corday, M.D.  
Guillermo De Venecia, M.D.  
Jose M.R. Delgado, M.D., D.Sc.  
Sir John Eccles, Ph.D.  
Jorge Garcia, M.D.  
Vay Liang Go, M.D.  
Dwight E. Harken, M.D.  
Juan Lopez Ibor, M.D.  
Eduardo Kraft, M.D.  
Willial Likoff, M.D.  
Walton C. Lillenhei, M.D.  
Waldo E. Nelson, M.D.  
Antonio Quiroz, M.D.  
Hernan M. Reyes, M.D.  
Shunji Sano, M.D.  
Cuno W. Winkler, M.D.

**Visiting Professors:**

Prof. Dennis Kin Kwok Au, M.Sc.  
Dave Atkion, M.D.  
Lyle Andrew Baker, M.D.  
Kevin C. Barron, M.D.  
Samuel Bernal, M.D.  
Jeffrey Blumer, M.D.  
Nemat O. Borhan, M.D.  
Prof. Philippus Christoffel Bornman  
Prof. Frank J. Branicki  
George C. Burch, M.D.  
Leonor Rivera Calimlim, M.D.  
SC. Sydney Chung, M.D.  
Francisco Grande Covian, M.D.  
Simon Dack, M.D.  
Shigeyuki Deura, M.D.  
E. Grey Dimond, M.D.  
Jose Evangelista, M.D.  
Paul Fagan, M.D.  
Prof. David Fletcher  
Charles Ngo Fisch, M.D.  
Susan Galandiuk, M.D., F.A.C.S.  
William Gibson, M.D.  
John R. Graybill, M.D.  
Prof. Jacques A. Gruwez, M.D., F.R.C.S.  
Prof. Bruce H. Haughey, MBChB, M.S., F.A.C.S., F.R.A.C.S.  
Charles A. Hart, M.D.  
Prof. George Herberer, M.D.  
Ralph George Henricke, M.D.  
Peter William Holmes, M.D.  
Edbert Huizing, M.D.  
John Jewsbury, M.D.

Prof. Ivan D.A. Johnston, F.R.C.S.  
Samuel Kaplan, M.D.  
Samuel Katz, M.D.  
Hugo Kestelot, M.D.  
Tan Ser Kiat, M.D.  
Joseph Wing-Cheng Leung, M.D.  
Prof. Arthur K.C. Li  
Adnand N. Malavija, M.D.  
Rodolfo Molina, M.D.  
Eddie Honely Moore, M.D.  
Fr. Albert S. Moraczewski, O.P.  
Robert M. Nakamura, M.D.  
Roland U. Navarro, M.D.  
John Douglas Nelson, M.D.  
Philip Newall, MCI Aud  
Yoshinori Nozawa, M.D.  
Prof. Terence William O'Connor, M.D.  
Fr. Kevin D. O'Rourke, O.P.  
William Oh, M.D.  
Prof. Akira Okada  
Fernando Ona, M.D.  
Tat Hin Ong, M.D.  
Prof. Alberto Pena, M.D.  
Romeo Perez, M.D.  
Prof. Hiram C. Polk, M.D., F.A.C.S.  
Joachim Prein, M.D.  
Neils C.R. Raiha, M.D.  
Lee B. Reichman, M.D.  
Hernan M. Reyes, M.D.  
Thomas W. Rice, M.D.  
Alfredo Rocha, M.D.  
Prof. Htut Saing  
Prof. Kenji Sakurai, M.D., F.A.C.S.  
Minoru Sakurai, M.D.  
Helen Jean Shadomy, M.D.  
Jeffrey Starke, M.D.  
Alex J. Steigman, M.D.  
Hiroshi Takeuchi, M.D.  
Han Sheuing-Tat, M.D.  
Prof. John Terblanche  
Prof. Vanchai Vatanasapt  
Dharmapuri Vidyasagar, M.D.  
Prof. Fu Chan Wei  
John Weisel, M.D.  
Christopher B. Williams, M.D.  
Dielmar Wurbs, M.D.  
Prof. Tatsuo Yamakawa, M.D., F.A.C.S.

#### **FACULTY COUNCIL**

The Office of the Dean of the Faculty of Medicine and Surgery is assisted by the Faculty Council with regard to major educational and administrative policies.

## COMMUNITY MEDICINE PROGRAM

The Community Medicine Program of the UST Faculty of Medicine and Surgery is located at Barangay North Bay Boulevard (Southside NBBS) in Lapu-Lapu and Bangus Streets, Kaunlaran Village in Navotas City. It is situated near the San Lorenzo Ruiz Parish Church with Barangays Lichangco and Bangkolasi as adjacent communities.

The one-month rotation provides students with engagement and mentoring experience in a community-based generalist practice. Students are given the opportunity to develop a conceptual understanding of medicine and primary health care while developing skills in history taking, physical examination and clinical reasoning. It also provides students exposure to personal and professional issues in medical training and practice in a community. The program offers an integrated theory-practice curriculum on broad public health perspectives and skills necessary for primary care physicians.

The general objectives of the course are to: apply theories, principles and methods in primary health care; contribute to the promotion of health and prevention of diseases in the community through health programming; provide opportunities to become an effective health manager, social mobilizer, health educator, healer and researcher in the setting of a marginalized community.

At the end of the course, students should be able to: work effectively with the key people and target population/s of the selected community; conduct a situational analysis of the designated community; prioritize public health and safety problems/ needs; formulate a health program plan for the identified community and participate in the implementation and/or evaluation of a community health program.

The goals of the community-based education experiences include: understanding the relationship between community and social factors and health status; developing the skills necessary to work out community programs in partnership with residents/ target population to promote health and disease prevention, and provide disease management and support services and the over-all improvement of patient care and community health.

Required learning experiences for the course include: preparatory/ introductory activities, orientation to the program, patient care at the ambulatory clinic in a community setting and actual fieldwork on assigned community/ schools.

The program involves 34-35 junior interns clustered in a group accompanied by 11 faculty members, 2-3 of whom accompany them daily. Official hours are between 8-9 am and 3-4 pm with a 45-60 minute travel time by bus to the program site from UST. The student: teacher ratio is 11:1. The set-up is live out with a structured program for implementation.

Junior interns are divided into 4 working committees (i.e 35/4) with 8-9 students assigned as members per group. On a day to day basis, 2-3 members will be assigned to different posts (i.e. A, B,C) to ensure that all students will have equal exposure. Each post will then be manned by 8-12 students at any one time.

The Working Committees include: (1) early childhood care (2) primary school health (3) secondary school health (4) college health.

This grouping aims to provide a holistic and integrated approach, as well as continuing implementation of a health program. Each committee must devise a health program containing 3 components: (1) education (2) service and (3) research. EDUCATION entails various awareness and information dissemination strategies. SERVICE refers to the provision of any medical or health related assistance/goods (eg. health screening procedures, clean up drives, intensive campaigns, etc.). RESEARCH is the ability to address research problem and pose a plausible solution utilizing some data collection during the program implementation. In the future, there should be no repetition of activity in the recent 4 months unless well justified. All program proposals must be approved by the respective consultant-in-charge.

All students will be situated in the program site Mondays to Fridays but divided into 3 different areas.

The AMBULATORY CLINIC is based inside the San Lorenzo Parish managed by the Dominican Order. Activities are divided in clinic-based and field-based programs. Lectures, small group discussions, mini-workshops, fora consultations shall be undertaken by students with their respective assigned families.

Course requirements include written reports, oral reports and school health data bases. Students shall be evaluated based on submitted reports, summative examinations and clinical teaching performance.

## **THE PATHOLOGY MUSEUM**

Realizing the importance of museum materials as excellent tools for the teaching process, the Department of Pathology has been collecting gross specimens for Autopsy and Surgical Pathology. Specimens representative of the more common lesions as well as those representing rare diseases are collected and mounted in museum jars. The Pathology Museum was originally situated in a small room adjacent to the present office of the Dean of Nursing.

In 1983, the Dean of the Faculty of Medicine and Surgery, cognizant of the teaching value of gross specimens and as part of his program to revitalize all the Museums of the medical school, officially requested the Department of Pathology to expand its Museum facilities. He ordered all the concrete and glass shelves along the corridor fronting the Pathology Laboratory to be cleaned, repainted and lighted. He also requested the Department to requisition for more museum glass jars and to collect more and more gross specimens especially those with teaching values. He asked that all these mounted specimens be properly labeled for easy reference and that accession numbers be provided for each specimen so that viewers may readily avail of the clinical history for easy and intelligent clinico-pathologic correlation.

Today, the Pathology Museum has a total of 640 different specimens mounted in glass jars in the permanent glass cabinet along the corridor just outside the Pathology Laboratory.

A museum-curator is assigned to care for the museum and its contents which have become a definite attraction not only to Medical students, but likewise to the students from other institutions, alumni and other guests.

## **THE ANATOMY GALLERY**

The Anatomy Gallery was formally established in September 1983 through the initiative of the Office of the Dean of the UST Faculty of Medicine and Surgery and through the efforts of Dr. Consuelo O. Cabral, the Anatomy Department Chair at that time and Dr. Benedicto Rivera, Chief of Section of Gross Anatomy. It was initially founded with endowment from the UST Medical School Alumni Foundation (Los Angeles) and has been incorporated into the Department of Anatomy because of its unique teaching value. It is situated on the fourth floor of the Medicine Building at one end of the Anatomy Dissection Hall.

The Anatomy Gallery serves as a showcase of all the teaching materials in Anatomy. The Gross Anatomy display consists of a total of 32 containers made of thick imported glass of varying dimensions, the largest big enough to accommodate an entire trunk of the human body. Some are tall enough to contain an entire human extremity.

Within the glass containers are preserved dissected organs of the human body arranged according to systems. Of interest are the displays of the dissected upper and lower extremities showing the muscles and related neurovascular structures, cross sections of the human trunk at various levels showing the various visceral organs in situ with their anatomic relations.

The embryology display consists of fetuses in different ages of gestation. Likewise, fetuses with congenital anomalies like cleft lip, cleft palate and anencephaly are shown. The Neuroanatomy display shows the brain in different views. Likewise, midsagittal coronal and longitudinal section provides the viewer with a more intimate understanding of the intricate structure of the human brain. A gross specimen of the entire spinal cord with spinal nerves in situ (donated by Prof. Shigeyuki Deura) is another interesting feature of the gallery.

On March 2006, through the generosity of Dr. Prem Manchanda and the dedication of the Anatomy Staff, the renovation of the gallery was begun and formally inaugurated and blessed on April 24, 2006. It was renamed Dr. Julieta Hayag-Manchanda UST Anatomy Gallery, a 1983 UST MD alumna the deceased spouse of the benefactor.

The gallery in its entirety gives the viewer a realistic perspective of the human organs and their intimate relationship with other organs and systems. All of the organs with appropriate markers provide a useful guide for the student of Anatomy. The uniqueness of this anatomy display (the only one in the Philippines) certainly surpasses any other attempt at plastic limitations of the human anatomy.

## **THE UST MEDICINE MUSEUM**

The UST Faculty of Medicine and Surgery (FMS) is a pioneer and premier medical school in the country. It dates as far back as 1871, when its Dominican educators envisioned that well-trained doctors must be at the helm of the country's health needs. Since its establishment, the UST FMS has produced the most number of doctors in the country, committed to specialized training of physicians and created many of medical breakthroughs in both the local and international scenes.

Nevertheless, one cannot have a good grasp of the history of medicine in the Philippines without knowing the history of the Faculty of Medicine and Surgery of UST. This is so because both are strongly linked with each other culturally and historically. Even the foremost hero of the country, Dr. Jose P. Rizal who incidentally is also an alumnus of the Medical School, makes UST a proud alma mater. The UST FMS therefore can proudly declare that its grounds are hollowed because it has produced an illustrious legacy that is steeped in tradition, rich in cultural and historical heritage. It lays claim to the title of "cradle of noble healers" grounded on ethics, faith and patriotism. It would therefore be unconscionable to lay waste this wealth of legacy if such would not have a place it can call home.

The UST Medicine Museum has been envisioned to be a recognized center for medical cultural heritage by showcasing the great legacy of the Medical School preserved through time and space and tasked to pay tribute to its venerable alumni by regularly exhibiting museum collections in medical instruments, breakthroughs, artifacts, models, paintings, inventions and other tangible cultural heritage.

The Medicine Museum shall integrate the rich collections of all the departments that compose and support the mission and vision of the school.

Located on the second floor of the Medicine Building, the Museum also serves as a supplementary teaching and learning methodology for students and professors, and other minds interested in the noble science and art of Medicine. Visiting hours from Monday to Friday, are from 8:00 a.m. to 12:00 noon and from 1:00 p.m. to 4:00 p.m.

**THE DR. HUBERT G.H. WONG**  
**MEDICAL INFORMATICS CENTER**

The UST Medical Informatics Center is the premier resource in the country that actively seeks to harness the latest advances in information technology for the enhancement and support of Medical Education and Research at both undergraduate and postgraduate levels.

Consisting of two computer laboratories and a virtual library, the Center is equipped with a local network of over 200 computer stations with both cable and Wi-Fi connections to high-speed broadband internet, and access to the widest collection of full-text online electronic journal databases in the country. A wide range of IT services is likewise offered, from hardware troubleshooting and repair, to software configuration, to presentation graphics, and even to digital video capture and editing.

The demands of learning medicine in a globalized environment can be quite challenging. The Faculty of Medicine Surgery has taken a bold step forward by introducing a course on Medical Informatics to all incoming freshmen, and later on, to smaller groups of students and trainees at various levels of competence.

This radically augments the traditional educational methods of relying on lectures and books alone as a source of knowledge. The huge volume of biomedical information that currently exists is impossible to cope with by traditional methods. Hence, to effectively learn medicine, the medical student must develop the habits and styles of self-directed, highly motivated, lifelong learners. In this setting, the average student will soon find himself at a loss to cope with the increased requirement for personal productivity unless he receives guidance specifically intended to develop and strengthen skills to help meet the demands of self-directed learning. Medical Informatics is envisioned to facilitate the search for biomedical knowledge and information so that the students and trainees will be adequately equipped with the techniques and skills of searching for, acquiring and retrieving, and storing necessary biomedical information so that it will be available when and where it will be most valuable – whether in the classroom setting or at the patient's bedside.

The indispensable role of Medical Informatics in modern medical education arises from an increasing awareness that biomedical knowledge and clinical information about patients are essentially unmanageable by traditional paper-based methods, and from a growing conviction that the processes of knowledge retrieval and expert decision-making are as important to modern biomedicine as the knowledge-fact base on which clinical decisions or research plans are made.

These perceptions have resulted in critical observations that among the prime responsibilities of medical educators is the task to ensure that medical graduates have a foundation in Medical Informatics that will support them as physicians in the 21st century, to efficiently obtain and utilize increasingly complex information for life-long independent learning, problem-solving, and decision-making as applied to competent and compassionate patient care.

## **RESEARCH CENTER FOR THE HEALTH SCIENCES**

The Research Center for the Health Sciences (RCHS) was established on October 16, 1984. It was then called the Health Sciences Research Management Group (HSRMG) whose functions were to assist in research protocol development and collate research outputs. In 2003, with funds from the University and the medical alumni, the old Experimental Surgery building underwent an extensive renovation to house the Research Center for the Health Sciences. This three-storey building is located at the back of the St. Martin de Porres (Medicine) Building. The experimental animal laboratory, located on the ground floor, provides facilities for animal experimentations. The second floor, where the office of the Director and the staff is located, provides a conference room and computers with internet connections. The third floor is the research laboratory. It contains newly-acquired state-of-the-art research equipment. The equipment, offered for free to the faculty, provide capabilities for research in basic and clinical sciences. The RCHS has hired the services of a full-time molecular biologist and part-time biostatistician to assist the researchers. Since its inauguration, there have been several projects in the Center. Faculty members involved in clinical trials are also using the facilities of the Research Center.

The other function of the Research Center is to screen and approve research projects for funding by the University. The research grants are made possible through the Research and Endowment funds of the University. To date, million of pesos in grants have been awarded to faculty members.



## **ELECTRON MICROSCOPY UNIT**

The Electron Microscopy Unit of the Faculty of Medicine and Surgery is the latest of all the units in the College. The Unit has been established under the Office of the Dean with the following objectives: 1) to coordinate the use of electron microscope in the teaching of subjects that require ultrastructural evaluation; 2) to coordinate and assist in ultrastructural research works; and 3) to provide diagnostic electron microscopy services.

The EMU offers the services of the electron microscopy laboratory primarily to the Faculty of Medicine and Surgery. These services, however, are also available to other Faculties and Colleges of the University of Santo Tomas and to outside colleges and universities upon the approval of the Office of the Dean.

The Electron Microscopy Unit is presently located in Room 120, ground floor, Medicine Building, near the office of the Department of Pathology.

## **THE HEALTH SCIENCES LIBRARY**

The Health Sciences Library is located on the 4th floor of the St. Martin de Porres Building. It consists of three areas: the reading room, the research room where the general collections are found, and the Maryland Room on the mezzanine where the journals and stacks of old books and bound journals are located. It is fully air conditioned.

A library committee of the faculty serves as a liaison between the Medical School and the Library whose primary role is to oversee the continued updating of books and journals.

The library is open from 8:00 a.m. to 7:00 p.m. and the mezzanine floor from 9:00 a.m. to 12:00 noon; 1:00 p.m. to 7:00 p.m.

## **OFFICE OF CONTINUING MEDICAL EDUCATION**

In line with the concept of medical education as a continuous and life-long process and in keeping with its tradition and mission, the Faculty of Medicine and Surgery has pioneered in providing medical educational programs, facilities and services to the graduate physicians.

Initially, the program consisted of postgraduate courses of various medical facilities, clinical grand rounds, conferences and special lectures that were open to all medical practitioners. In 1971, in a year-long celebration of the centennial of its foundation, the Faculty organized monthly postgraduate courses, each course undertaken by a different department or discipline. It was also in this year that the UST Faculty of Medicine and Surgery started its pioneering project of presenting graduate courses outside the medical school, with the holding of the “three days of the cardiology” program in eleven key cities and towns within a seven-month period.

In 1979, the Office of Continuing Medical Education was created to coordinate and supervise all efforts, plans and programs of the different departments in continuing medical education and to attend to all their official needs in these activities. It was also tasked to initiate more activities for continuing medical education. In addition, the goals and thrust of the University of Santo Tomas, in general, and the Office of the Dean of the Faculty of Medicine and Surgery, in particular, must be filtered in to the CME Office into the various departments. Postgraduate courses, though given and conceptualized by different departments, will have a distinctly Thomasian spirit. Presently, the CME has given emphasis on the integration of bioethical considerations and the Thomasian school of thought in the course content of each and every postgraduate program.

The current Office of Continuing Medical Education has personalized its activities. It has set guidelines that establish standards of excellence for all the postgraduate courses in the Faculty. It is a centralized unit that provides all the needs of the departments relating to continuing medical education activities.

## **GENERAL GUIDELINES FOR SCHOLARSHIPS**

### **A. Academic Scholarship (Santo Tomas Scholarship)**

Holders of B.S. degree from various colleges in the University entering first year in Medicine with Summa Cum Laude and Magna Cum Laude honors are awarded full and half scholarships, respectively, upon due certification of such honors by the corresponding Deans.

All college scholarships and discounts involve tuition only and are extended on a year-to-year basis provided the student maintains a general weighted average of not less than eight-six percent (86%) or its equivalent during the year in Medicine.

### **B. Special Scholarship and Educational Grants in the Faculty of Medicine and Surgery (for financially and academically deserving students)**

1. Zamora-Masculiana Scholarship Fund
2. Dr. Mariano Alimurung Memorial Scholarship
3. St. Dominic Scholarship Fund
4. Dr. Alberto Zalamea Scholarship Fund
5. USTMAA-Maryland Scholarship
6. Bienvenido and Salome Tan Scholarship
7. PMA of Greater St. Louis Scholarship Foundation, Inc.
8. Judge Antonio Consing Scholarship
9. USTMAA-Society of Southern California Scholarship
10. Dr. Servando Arellano Scholarship
11. Association of Philippine Physicians of Ohio
12. Ong Siong Te Scholarship
13. Dr. Gregorio A. Moral Jr. Scholarship
14. Ana Ti Mata Scholarship
15. Prima Sta. Maria Tumbokon Scholarship
16. UST Medicine Class 1958 Scholarship
17. Santo Tomas Journal of Medicine Scholarship
18. Anjali Nath Scholarship
19. Security Bank Foundation, Inc. Scholarship
20. UST Medicine Class 1956 Scholarship (c/o Dr. Agustin Yap)
21. Glaxo-Smith-Kline Foundation
22. Green Cross-Jesus Co Ay Tian Foundation
23. UST Medicine Class 1970 Scholarship
24. Tau Mu Foundation

### **C. Selection**

The Committee on Special Scholarship and Educational Grants is composed of the following: the Chair of the Committee, various consultants from different Departments all of whom are appointed by the Dean of the Faculty of Medicine and Surgery, the Administrative Officials of the Faculty, namely, the Dean, the Assistant Dean, the Faculty Secretary and the Regent. The President of the Medicine Student Council is also asked to sit in during the Committee meetings.

#### D. Procedure and Requirements

Any student who feels that he needs financial assistance fills out an application form and is then directed to the Chair of the Committee. The Chair interviews the applicant as to the reason for the financial need, as well as the academic standing of the student. If the Chair concludes that the student is eligible for the fund, he will present the student's data during the Committee meeting. The Committee then deliberates and decides whether the student is really deserving of the financial assistance. The Committee may also request for additional information or requirements from the applicant through the Chair.

The requirements for a grant are as follows:

1. The applicant has had no failing grades, nor had to take remedial examinations in the previous semester.
2. There is a financial need for assistance based solely on the interview by the Committee Chair.
3. For a grade average of 87% below, the student is given a P35,000.00 grant per semester.
4. For a grade average of 88% and above, he is given a grant of P70,000.00 per semester.
5. Application for renewal of the grant is required every semester.
6. A grant may be revoked if the student incurs any failing grades, or needs to take a remedial examination.
7. The student may also request for additional financial assistance, if this is truly needed, by addressing a letter to the Committee Chair. The additional assistance may be given pending the availability of funds and the perceived financial need.

#### **ENDOWMENTS FOR PROFESSORIAL CHAIRS AND RESEARCH PROJECTS TRUST FUNDS**

1. Dr. Hubert G.H. Wong, Ph.D. LRU Trust Fund
2. UST Medicine LRU Fund
3. UST Medicine Class 1962 LRU Trust Fund
4. UST Medicine Class 1963 LRU Trust Fund
5. St. Cosmas and St. Damian Medical Library Trust Fund
6. UST Medicine Class 1967 Medical Library Trust Fund
7. Dr. Herminia David-Vijungco Pathway to Knowledge Medical Library Trust Fund
8. Dr. Carmen Dannug-Basug Medical Library Trust Fund
9. Dr. Ma. Teresa Guerrero-Bissonnette and Dr. Leonard L. Bissonnette Medical Library Trust Fund

#### **PROFESSORIAL CHAIRS AND RESEARCH CHAIRS**

1. Nestle-Philippines Professorial Chair in Infant Nutrition
2. Dr. Emilio Espinosa Professorial Chair in Public Health
3. ABBOTT Laboratories (Phil) Inc. Professorial Chair / Research Chair in Community Pediatrics
4. Dr. Ernesto Medina-Cue Research Chair in Clinical Pathology
5. Fr. Antonio Gonzales, O.P. Research Chair in Medicine

1. Fr. Juan Labrador, O.P. Research Chair in Medicine
2. Dr. Leopoldo Pardo Sr. Memorial Research Chair (LECA)
3. Dr. Leopoldo Pardo Sr. Professorial Chair in Basic Science
4. Dr. Antonio J. Gabriel Professorial Chair in Medicine
5. Time Realty Corporation Research Chair in Medicine
6. Philippine Commercial and Industrial Bank Research Chair in Medicine
7. Mariano and Raymunda Yatco Research Chair in Medicine
8. Dr. & Mrs. Saturnino Abesamis and UST Medicine Class 1933 Research Chair in Medicine
9. Dr. Basilio Bautista Research Endowment in Medical Science
10. Dr. Basilio Bautista Professorial Chair in Plastic Surgery
11. Drs. Romeo and Isabel Perez Professorial Chair in Obstetrics and Gynecology
12. Dr. Manuel Navarro Professorial Chair in Nutrition
13. Bank of the Philippine Islands Research Chair in Medicine
14. USTMAA Tristate Chapter (Pennsylvania, Delaware, New York) Professorial Chair in Basic Sciences I
15. USTMAA Tristate Chapter (Pennsylvania, Delaware, New York) Professorial Chair in Basic Sciences II
16. Dr. Jose P. Cocjin Professorial Chair in Basic Sciences
17. Dr. Lourdes Andaya Professorial Chair in Neurology
18. Dr. Jose and Stella Evangelista Professorial Chair in Cardiology
19. UST Medicine Class 1976 Professorial Chair in Medical Sciences
20. The Medical Research Project of the Philippine Medical Center, Inc.
21. Dr. Rosa Guevarra Research Chair in Medicine
22. Dr. Servando Arellano Professorial Chair in Obstetrics and Gynecology
23. Dr. Carmen Salgado-Ona Professorial Chair in Endocrinology
24. Don Jose Cojuangco Professorial Chair in Pediatrics
25. Dr. Honorio S. Ronquillo and Dr. Ibesita Ronquillo Professorial Chair in Physiology
26. USTMAA Michigan Professorial Chair in Medicine
27. UST Medicine Class 1967 Professorial Chair in Medical Sciences
28. CIBA-GEIGY (Phils) Inc. Professorial Chair in Dermatology
29. Dr. Estelito Madrid Professorial Chair in Biochemistry
30. UST Medicine Class 1963 Professorial Chair in Basic Sciences
31. Dr. Celso and Amor Carandang Professorial Chair in Oncologic Surgery
32. Dr. Felix Estrada Professorial Chair in Primary Health Care
33. Dr. Ireneo and Rosenda Palma Professorial Chair in Surgery
34. Dr. Ernesto M. Espaldon Professor of Plastic and Reconstructive Surgery Professorial Chair
35. Dr. Orlando S. Sison Professorial Chair / Research Chair in Anesthesiology
36. UNILAB Bayanihan Professorial Chair in Infectious Diseases
37. Dr. Jesus Javier Tan Professorial Chair in Allergology
38. Dr. Jesus Javier Tan Professorial Chair in Oriental Medicine
39. Dr. Alberto A. Lardizabal Professorial Chair in Pulmonology
40. Dr. Tarcila Laperal-Mendoza Professorial Chair in Infectious Dermatology
41. Lourdes Aclan-Ballecer Professorial Chair in Deafness Research
42. Dean Gilberto L. Gamez Professorial Chair in Neurology and Psychiatry
43. Hermogenes A. Santos Professorial Chair in Medicine
44. Guam Memorial Health Plan Professorial Chair in Community Medicine (Primary Health Care)
45. UST Medicine Class 1973 Professorial Chair in Basic Sciences
46. Drs. Manny & Zenaida Villafania Professorial Chair in Basic Sciences
47. Dr. Dionisio Rivera Professorial Chair in Urology
48. Gerardo Rocha UST-Chile Professorial Chair in Ecclesiastical Studies and Bioethics
49. Zamora-Masculana Research Chair in Medicine
50. Dr. Juanita Estrada Research Chair in Clinical Pathology
- Justice Ambrosio Geraldez Research Chair in Clinical Medicine

## **STUDENT ORGANIZATIONS**

1. Medicine Student Council
2. Alpha Delta Mu Sorority
3. Asian Medical Students' Association
4. Gamma Beta Epsilon Fraternity
5. Medical Missions, Inc. – Student Group
6. Medicus et Vitae Confraternity
7. Medicine Alliance for the Arts
8. Mu Sigma Epsilon Sorority
9. Phi Sigma Gamma Fraternity
10. Scintilla Juris Fraternity
11. Sigma Beta Tau Phi Fraternity
12. Sigma Tau Delta Sorority
13. Terpsichorean Circle
14. Theta Lambda Phi Sorority
15. UST Filipino-Chinese Medical Students' Association
16. UST Medicine Glee Club
17. Zeta Beta Mu Fraternity

## **TEXTBOOKS**

### **FIRST YEAR**

#### **GROSS ANATOMY**

Self-Instructional Module in Gross Anatomy

By: Bienvenido Angeles, M.D.  
Natividad E. Santos, M.D.

Atlas: Choice of

1. A Regional Atlas of the Human Body  
By: carmine D. Clemente, 6th Edition
2. Atlas of Human Anatomy  
By: Frank H. Netter, M.D.

References:

1. Cunningham's Textbook of Anatomy
2. Gray's Anatomy
3. Textbook of Anatomy by Hollinshead

#### **HISTOLOGY**

Textbooks:

1. Histology Textbook by Bloom and Fawcett
2. Histology Study Guide (Part I and II)  
By: Consuelo O. Cabral, M.D.

#### **NEUROANATOMY**

Textbooks:

1. Core Text of Neuroanatomy  
By: Melcolin Carpenter, 6th Edition
2. Carpenter's Human Neuroanatomy  
By: Andie Parent, 10th Edition
3. Clinical Anatomy for Medical Students  
By: Richard Snell, 4th Edition

#### **BIOCHEMISTRY**

References:

1. Textbook of Biochemistry With Clinical Correlation  
By: Thomas M. Devlin, 5th Edition
2. Lehninger Principles of Biochemistry  
By: David L. Nelson and Michael M. Cox, 3rd Edition
3. Biochemistry – The Molecular Basis of Life  
By: Trudy McKee and James R. McKee, 3rd Edition
4. Basic Medical Biochemistry – A Clinical Approach  
By: Dawn B. Marks, Allan D. Marks and Colleen M. Smith
5. Biochemistry  
By: Jeremy M. Berg, John L. Tymoczko & Lupert Stryer, 5th Edition
6. Medical Biochemistry  
By: N.V. Bhagavan, 4th Edition

6. Biochemistry  
By: Matthews, Van Holde & Ahern, 3rd Edition
7. Biochemistry  
By: Donald Voet, Judith G. Voet, 3rd Edition
8. Harper's Biochemistry  
By: Murray, Granner, Mayes and Rodwell, 26th Edition
9. Molecular Cell Biology  
By: Lodish, Berk, 4th Edition
10. Molecular Biology of the Cell  
By: Alberts, Lewis, Roberts, Bray, Raff & Watson, 3rd Edition
11. RENI – Recommended Energy and Nutritional Intake  
By: FNRI, DOST, Philippines 2002 edition

## **PHYSIOLOGY**

Textbook:

Berne and Levy, Physiology, 5th Edition, 2004

References:

1. Guyton and Hall, Textbook of Medical Physiology, 10th Edition, 2000
2. Ganong Review of Medical Physiology, 18th Edition, 1997
3. Boron and Boulpaep, Medical Physiology, 2003

Laboratory Manual – staff prepared

## **PSYCHIATRY I**

Textbook:

1. Hurlock, Elizabeth, Development Psychology, 6th Edition
2. H. Kaplan, B. Sadock, J. Grebb, Synopsis of Psychiatry, 9th Edition, 2003

## **PREVENTIVE MEDICINE I**

HEALTH STATISTICS, RESEARCH METHODOLOGY, EPIDEMIOLOGY / POPULATION DYNAMICS, FAMILY AND COMMUNITY HEALTH

1. An Introduction to Medical Statistics, by Martin Bland, 1987
2. Basic Biostatistics in Medicine and Epidemiology, by Alfred A. Rimm; Arthur J. Hartz' John H. Kalbfleish; Alfred J. Anderson; Raymond G. Hoffman
3. Foundation of Statistical Analysis for the Health Sciences Vol. 1, 2, 3 by Ophelia M. Mendoza; Maridel P. Borja; Teodoro L. Sevilla; Caridad A. Ancheta; Ofelia D. Sabiel; Jesus N. Sarol Jr., 1997
4. A Study Guide to Epidemiology and Biostatistics, by Morton and Hebel
5. Philippine Health Statistics, DOH, 1998
6. Research Methods in Health and Medicine, Vol. 1, by F.S. Sanchez, Jr.; S.I. Morelos; J.C. Baltazar, 1989
7. Research Methods in Health and Medicine, Vol. 2, by F.S. Sanchez, Jr.; J.C. Baltazar, B.F. Agbayani, 1990
8. Designing Clinical Research, by Stephen B. Hulley; Steven R. Cummings
9. Epidemiology, Principles and Methods, by Macmahon and Pugh, 1970
10. Principles of Epidemiology Vol. 1 College of Public Health University of the Philippines



1. Medical Epidemiology, by Raymond Greenberg, 1993
2. Textbook of Family Practice, by Rake
3. The Filipino Physician Today, by Maglonzo, E.I., UST Publishing House, 2002

## BIOETHICS I-IV

### Textbook:

Ashley, Benedict, O.P. and O'Rourke, Kevin, O.P., Ethics of Health Care, Philippine Edition: Manila, UST Department of Bioethics, 3rd Printing, 1997

### Other Sources:

1. Beauchamp, Tom L. and Childress, James F., Principles of Biomedical Ethics (New York: Oxford University Press, 4th Edition, 1994)
2. Drane, James F., Becoming a Good Doctor. The Place of Virtue and Character in Medical Ethics (Kansas City, MO: Sheed & Ward – The Catholic Health Association, 1988)
3. Gabriel, Pedro, Ethical Wisdom (Manila: UST Printing Office, 1983)
4. Gomez, Fausto B., Promoting Justice, Love, Life (Manila: SRC and UST Publishing House, 1998)
5. Macintyre, Alastair, After Virtue (Notre Dame, Indiana: University of Notre Dame Press, 2nd Edition, 1984)
6. O'Donnell, Thomas J., S.J., Medicine and Christian Morality (New York: Alba House, 2nd Edition, 1991)
7. Pastrana, Gabriel, Medical Ethics (Manila: UST Printing Office, 2nd Printing, 1995)
8. Reich, Warren T. (Editor), Encyclopedia of Bioethics (New York/London: The Free Press, 1978)
9. Tan-Alora, Angeles, Curriculum in Bioethics (Manila: SEACB, 1992)
10. UST Department of Bioethics, Forum in Bioethics
  - 1: Bioethics, A Growing Concern (Manila: UST Department of Bioethics, Faculty of Medicine and Surgery, UST Printing Office, 1994); ID., Forum in Bioethics
  - 2: Special Issues in Bioethics (UNITAS, Vol. 68, No. 2, June 1995); ID., Forum in Bioethics
  - 3: Relevant Ethical Issues in Healthcare (Manila: UST Department of Bioethics, Bookman Printing House, 1996); ID., Forum in Bioethics
  - 4: Bioethics, The Journey Continues (Manila: UST Department of Bioethics, UST Publishing House, 1997); ID., Forum in Bioethics
  - 5: Conscience, Cooperation, Compassion (Manila: UST Department of Bioethics, Jardi Press, 1998)
11. Vatican Congregation for the Doctrine of the Faith, Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation (Vatican City, 1987); ID., Declaration on Euthanasia (Vatican City, 1980); ID., Declaration on Procured Abortion (Vatican City, 1974)
12. John Paul II, Evangelium Vitae, The Gospel of Life (The Vatican, 1994)
13. Beyond a Western Bioethics, ed. By Alora, Angeles Tan, Lumitao, Josephine, Georgetown University Press, USA, 2001
14. Ethical Guidelines in Medical Practice, ed. By Gomez, Fausto, OP, Department of Bioethics, UST Publishing House, Manila 2001
15. Ethics and Medics. The National Catholic Bioethics Center Newsletter, USA
16. National Catholic Bioethics Center Quarterly Journal (NCBC), USA

1. H. Kaplan, B. Sadock, J. Grebb, Synopsis of Psychiatry, 9th Edition, 2003

## **CLINICAL NEUROSCIENCE**

Textbook:

Barbara F. Westmoreland, M.D., et al., Medical Neurosciences, 4th Edition

## **OBSTETRICS I**

Textbooks:

1. Williams Obstetrics by Helman and Pritchard, 20th Edition
2. Textbook of Obstetrics (Physiologic OB) APMC 1996

## **PEDIATRICS I**

Textbook:

Textbook of Pediatrics by Nelson, 17th Edition

Reference:

Textbook of Pediatrics and Child Health by del Mundo, Estrada, Santos and Ocampo, 4th edition

## **ANESTHESIOLOGY**

Textbook:

1. Introduction to Anesthesia and Principle of Safety Practice, by Dripps
2. Neural Blockade Inclerical Anesthesia Management of Pain, by M.J. Courins @P.O. Bridinbaugh, 3rd Edition

## **THIRD YEAR**

## **MEDICINE II**

Textbook:

Harrison's Principles of Internal Medicine, 12th Edition

Reference:

Cecil's Textbook of Internal Medicine (latest edition)

## **SURGERY II**

Reference:

1. Sabiston Textbook of Surgery, 16th Edition
2. Principles of Surgery, 7th Edition, by Schwartz, Shires and Spencer

References:

1. Microbiology by Zinsser, 30th Edition, 1997, Prentice-Hall International, Inc. by Wolfgang K. Joklik, D. Phil., Hilda P. Willet, Ph.D., D. Bernard Amos, M.D., Catherine M. Wilfert, M.D.
2. Medical Microbiology by Patrick M. Murray, Ph.D., George S. Kobayashi, Ph.D., Michael A. Pfaller, M.D. and Ken S. Rosenthal, Ph.D.
3. Medical Microbiology, 2nd Edition, Mims. Playfair, Roitt, Wakelin, Williams, 1999, Mosby, Hardcourt Publisher Ltd.
4. Medical Laboratory Manual for Tropical Countries of Cheeseborough
5. Fungus Diseases in the Orient by Glenn S. Bulmer, Ph.D.

## **PARASITOLOGY**

Textbook:

Basic Clinical Parasitology by Franklin A. Neva and Harold W. Brown, latest edition

References:

1. Clinical Parasitology by Beaver, et. al., latest edition
2. Medical Parasitology by Markel and Vogue, latest edition

## **CLINICAL PATHOLOGY**

Textbook:

Clinical Diagnosis and Management by Todd and Sandford

Reference:

Clinical Laboratory by Gradwohl

## **PREVENTIVE MEDICINE II**

ENVIRONMENTAL SANITATION / HUMAN ECOLOGY, OCCUPATIONAL MEDICINE / MEDICAL SOCIOLOGY, EVIDENCED-BASED MEDICINE, CRITICAL APPRAISAL / HEALTH ECONOMICS

1. Readings in Preventive Medicine II, by Rosa S. Carreon, Lourdes G. Llamas
2. Principles of Ecology, by Richard Brewer
3. Dynamics of Health and Disease, by Carter L. Marshall
4. Medical Sociology, by David Mechanic
5. A Sociological Framework for Patient Care, by Folta and Deck

## **SURGERY I**

References:

1. Sabiston Textbook of Surgery, 16th Edition
2. Principles of Surgery, 7th Edition, by Schwartz, Shires and Spencer

## **PSYCHIATRY II**

Textbooks:

1. A. Freedman, et. al., Modern Synopsis of the Comprehensive Textbook of Psychiatry, 3rd Edition

## **SECOND YEAR**

### **MEDICINE I**

Textbook:

Clinical Guide to Physical Examination by Barbara Bates (latest edition)

Reference:

Bedside Diagnostic Examination by Degowin and Degowin (latest edition)

### **PATHOLOGY**

Textbook:

Robbins and Cotran, Pathologic Basis of Diseases, 7th Edition,

By: Vinay Kumar, M.D., Abul K. Abbas, MBBS, Nelson Fausto, M.D.

Reference:

Rubin's Pathology, 4th Edition, Clinicopathologic Foundation of Medicine, By: Emmanuel Rubin, M.D., Fred Gostein, M.D., Raphael Rubin, M.D., Roland Schwarting, M.D., David Strayer, M.D.

### **PHARMACOLOGY**

Textbook:

Basic and Clinical Pharmacology by C.G. Katzung, 9th Edition, 2004

References:

1. Goodman and Gilman's The Pharmacologic Basis of Therapeutics by A.G. Gilman, T.W. Rall, A.S. Niles, P. Taylor, 10th Edition, 2001
2. Modern Pharmacology with Clinical Application by Charles R. Craig & Robert E. Stitzel, 6th Edition, 2004
3. Pharmacology by H.P. Rang, M.M. Dale, J.M. Ritter, P.K. Moore, 5th Edition, 2003
4. Melmon and Morelli's Clinical Pharmacology by S. George Carruthers, Brian B. Hoffman, Kenneth L. Melmon, David W. Nierenberg, 4th Edition, 2000
5. Philippine National Drug Formulary: Essential Drug List, Volume I, 5th Edition, 2000
6. Philippine National Drug Formulary: Essential Drugs Monographs, Volume II, 1997

### **MICROBIOLOGY**

Textbook:

Medical Microbiology, by Jawetz, 23rd Edition, 2004

### **PEDIATRICS II**

Textbook:

Textbook of Pediatrics by Nelson, 17th Edition

Reference:

Textbook of Pediatrics and Child Health by del Mundo, Estrada, Santos and Ocampo, 4th Edition

## **GYNECOLOGY**

### Textbooks:

1. Comprehensive Gynecology, 3rd Edition, 1997, Mischell DR., Stencheves, MA, Droegenmuller, W., Herbst, AL
2. Novak's Gynecology, 12th Edition, Berek, JS, Adashi, EY, Hillard, PA
3. Green's Gynecology – Essentials of Clinical Practice, 4th Edition, Clarke-Pearson, DL, Daewood, MY

### Reference:

Gynecology Principle and Practice, Kistner

## **DERMATOLOGY**

### Textbook:

Andrew's Diseases of the Skin (Clinical Dermatology), by Richard B. Odon, M.D., William D. James., M.D., Timothy G. Berger, M.D., WB Saunders Company, 9th Edition

### Reference:

Fitzpatrick's Dermatology in General Medicine, by Irwin M. Freedberg, M.D., Arthur Z. Eisen, M.D., Klaus Wolff, M.D., K. Frank Austen, M.D., Lowell A. Goldsmith, M.D., Stephen Katz, M.D., Thomas B. Fitzpatrick, M.D., McGraw Hill Companies, Inc., 6th Edition

## **PSYCHIATRY III**

### Textbook:

1. H. Kaplan, B. Sadock, J. Grebb, Synopsis of Psychiatry, 9th Edition, 2003
2. DSM IV, American Psychiatric Association

## **NEUROLOGY**

### Textbook:

Principles of Neurology by Raymond D. Adams, Maurice Victor, 9th Edition, 1997

## **RADIOLOGY**

### Textbook:

Squire's Fundamentals of Radiology by Robert A. Novelline, M.D. 5th Edition

## **LEGAL MEDICINE**

### Textbooks:

1. Handbook on Fundamentals of Forensic Medicine and Medical Jurisprudence by Miguel G. Zarraga, M.D., LLB
2. Legal Medicine by Pedro Solis, M.D., LLB
3. Medical Jurisprudence by Pedro Solis, M.D., LLB

## **OBSTETRICS II**

### Textbooks:

1. William's Obstetrics by Hellman and Pritchard, 21st Edition
2. Textbook of Obstetrics (Physiologic and Pathologic, 2003)

## **OTORHINOLARYNGOLOGY**

### Textbooks and References:

1. Fundamentals of Otorhinolaryngology, Adams, Bois, 6th Edition
2. Otolaryngology, Head and Neck Surgery, 3rd Edition, Charles W. Cummings, John M. Fredrikson, Lee A. Hocker
3. Diseases of the Nose, Throat, Ear, Head and Neck, Ballenger, 14th Edition
4. Textbook of Otorhinolaryngology and Head and Neck Surgery, K.J. Lee, 1st Edition

## **PREVENTIVE MEDICINE III**

### **PUBLIC HEALTH ADMINISTRATION, APPLIED EPIDEMIOLOGY**

1. Readings in Preventive Medicine III, by Department Staff
2. Textbook in Preventive Medicine, by Maxcy and Rassenau
3. Epidemiology in Community Health, by Jane Mc Cusker
4. Sanitation Code of the DOH
5. Principles of Administration, by Kuntz

## **COMMUNITY MEDICINE (CLINICAL CLERKSHIP)**

1. Clinical Preventive Medicine, by Richard N. Matzen; Richard S. Lang, 1993
2. Health Research Methodology, WHO Regional Publication
3. Surveys Methods in Community Medicine, by J.H. Abramson, 2nd Edition, 1979
4. Education for Health, WHO, 1998
5. Barangay Its Operations and Organization, by F.G. Ayson and J.P. Abletez
6. On Being in Charge, A Guide to Management in Primary Health Care, WHO, 1992
7. Guidelines for Training Community Health Workers in Nutrition, WHO, 1986

## **OPHTHALMOLOGY**

### **Textbook:**

General Ophthalmology by Daniel Vaughan, M.D, and Taylor Asburry, M.D., Lange Medical Publisher, 14th edition, 1996

### **References:**

1. Textbook of Ophthalmology by Harold Schei, M.D. and Daniel Albert, M.D., W.B. Saunders Co., 9th Edition, 1997
2. Ophthalmology: Principles and Concept, by Frank Newell, M.D., C.B. Mosby, 8th Edition, 1996

## **MEDICAL NUTRITION**

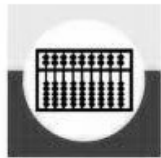
### **References:**

1. Shils, Olson, Shike, Modern Nutrition in Health and Disease, Vol. 1 and 2, 8th Edition
2. Mahan and Arlin, Krause's Food Nutrition and Diet Therapy
3. Food and Nutrition Research Institute, Department of Science and Technology, Recommended Energy and Nutrient Intakes, 2002 Edition

## **REHABILITATION MEDICINE**

### **Textbooks:**

1. Krusen's Handbook of Rehabilitation Medicine by William Kottke
2. Rehabilitation Medicine, Principles and Practice by Joel de Lisa



AMV College of Accountancy



College of Architecture



Faculty of Arts And Letters



Faculty Of Civil Law



College of Commerce and Business Administration



College of Education



Faculty Of Engineering



College of Fine Arts and Design



Faculty of Medicine and Surgery



Conservatory of Music



College of Nursing



Faculty of Pharmacy



College of Rehabilitation Sciences



College of Science

