# Schedule for Foreign Medical Students-6 years M.B.B.S Course International Studies School of Wenzhou Medical College

Code	Courses	Class	ss Hours			tory Type
		Total		Lecture	Laboratory	
1	Chinese(1)	96		06		6
	汉语 (1)					
3	China In Brief	32		32		2
	中国简介					
4	Human Anatomy (1)	96	5	54	42	5
	人体解剖(1)					
5	General Chemistry	72	5	51	21	4
	基础化学					
6	Physics	36	3	36		2
	物理学					
Total	3		2	269	63	
The Se	econd Semester Courses					
Code   Courses		C	lass I	Hours		Type
		T	otal	Lectur	e Laboratory	
1	Chinese (2)	90	5	96		6
	汉语 (2)					
2	Organic Chemistry	75	5	54	21	4
	有机化学					
3	Human Anatomy (2)	45	5	39	6	3
	神经解剖学					
4	Regional Anatomy	90	)	21	69	3.5
	局部解剖学					
5	Cell Biology	32	2	32		2
	细胞生物学					
6	Histology and Embryology	11	12	56	56	5.5
	组织学与胚胎学					

Code	Courses	Class Hours  Total Lecture Laborator			Type		
				Lecture		Laboratory	
1	Chinese (3)	96		96			6
	汉语 (3)						
2	Physiology	124		84		40	6.5
	生理学						
3	Psychology	32		32			2
	心理学						
4	Biochemistry 128		28	86		42	7
	生物化学						
5	Medical Ethics	32		32			2
	医学伦理学						
Total	1 412		12	330 82			
The Fo	ourth Semester Courses						
Code	Courses	Class Ho		Hou	rs	Type	
			Total		Lecture	Laboratory	
1	Chinese (4)		96		96		6
	汉语 (4)						
2	Medical Microbiology	69		54		15	4
	医学微生物学						
3	Medical Immunology		57		45	12	3.5
	医学免疫学						
4	Human Parasitology		48		32	16	2.5
	人体寄生虫学						
5	Pathological Anatomy		105		72	33	6
	病理解剖学						
6	Medical Genetics		48	36		12	3
•	医学遗传学						
Total			423		335	88	

The Fi	fth Semester Courses					
Code	Courses	Class Ho	Type			
		Total	Lecture	Laboratory		
1	Chinese (5)	96	96		6	
	汉语 (5)					
2	Health Statistics	54	54		3.5	
	卫生统计学					
3	Preventive Medicine	30	30		2	
	预防医学					
4	Pathophysiology	112	76	36	6	
	病理生理学					
5	molecule biology	48	36	12	3	
	分子生物学					
6	Traditional Chinese	96	96		6	
	Medicine&acupuncture and					
	massage					
	中医学及针灸推拿学					
Total	<u> </u>	436	292	48		
The Si	xth Semester Courses					
Code	Courses	Class 1	Hours	irs		
		Total	Lecture	Laboratory		
1	Chinese (6)	96	96		6	
	汉语 (6)					
2	Pharmacology	112	76	36	6	
	药理学					
3	Forensic Medicine	36	30	6	2	
	法医					
4	Sectional and Imaging Anatomy	48	33	15	2.5	
	断层解剖					
5	epidemiology	54	45	9	3	
	流行病学					
6	Nuclear Medicine	36	36		2.5	
	核医学					
Total		417	286	86		

The Se	eventh Semester Courses						
Code	Courses	Class Hours				Type	
		T	otal	L	ecture	Laboratory	
1	Chinese (7)	90	6	96			6
	汉语 (7)						
2	Image Diagnosis	96		6 48		48	4.5
	医学影像学						
3	Health law	32	2	32	;		2
	卫生法学						
4	Lab Diagnostics	32		20		12	2
	实验室诊断						
5	Diagnostics	144		96		48	7.5
	诊断学						
6	Philology	24		12		12	1.5
	文献检索						
Total		40	00	29	2	108	22
The Ei	ghth Semester Courses						
Code	Courses		Class Hours			Type	
			Total		Lecture	Laboratory	
1	Chinese		64		64		4
	汉语						
2	Internal Medicine (1)		128		80	48	6.5
	内科学(1)						
3	Surgery(1)		112		70	42	6
	外科学(1)						
4	Pediatrics	128			86	42	7
	儿科学						
Total			432		300	132	

The Ni	inth Semester Courses							
Code	Courses	Class Hours				Type		
		Total		Lecture		La	boratory	
1	Medical Chinese	64		64				
	医用汉语							4
2	Internal Medicine (2)	11	2	72		40		
	内科学 (2)							6
3	Surgery (2)	96		66		30		
	外科学 (2)							5
4	<b>Gynecology and Obstetrics</b>	12	8	86		42		
	妇产科学	7						7
5	<b>Dermatology</b> and	48		32		16		
	Venereology							
	皮肤性病学							2.5
Total		448		356	356		0	
The To	enth Semester Courses							
Code	Courses	Cla		Class Hours				Type
			Tota	I	Lectu	re	Laboratory	
1	Neurology	48			36		12	3
	神经病学							
2	Infectious Diseases	48		36			12	3
	传染病学							
3	Ophthalmology		48		36		12	3
	眼科学							
4	Dentistry		48	48 36			12	3
	口腔学							
5	emergency medicine	-	48	8 36		12		3
	急诊医学							
6	Psychiatry		48	48 36		12		3
	精神病学							
7	convalescence medicine		48		32		16	3
	康复医学							
8	Otorhinolaryngology		48		36		12	3
	耳鼻喉学							
Total			384		284		100	
	Total		4127		2777		925	

# **Course description of clinical medicine for International students**

Name of course: China in brief Time of course: 1 semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 32 Total 32

Course Description:

The course will give students a general introduction of the Chinese culture and history in order for them to live ,study and work pleasantly in china .the duration of the course can be flexible according to the needs of the students and the time available but lessons will center on the general introduction to china and her people .the content of the course consists of a brief account of Tianjin ,the history and geography of china ,the development of china ,minorities and language which have impact on the Chinese people ,places of historic interest and scenic beauty such as the great wall ,the students will have better exchanges and communication with Chinese people after they understand the Chinese culture and custom and will be able to study and work more smoothly .The course will use the following methods: interactive classroom ,discussion ,case studies ,DVD's and quizzes.

The course will provide students with a general introduction to China and encourage them to mix with the local society confidently.

Name of course: Basic Chemistry

Time of course: 1 semester Distribution of teaching hours:

Course format number of teaching hours

Lecture on51Experiment21Total cost72

Course Description:

This course is a science that deals with chemistry in regard to medicine .it is a necessary prelude to the study of later courses such as organic chemistry, biochemistry, molecular biology and so on .the main part—of this work describes the chemical properties of body fluids .there are four main kinds of properties :command properties of dilute solutions, solutions of electrolytes ,buffer solutions and acid—base titration .a thorough knowledge of basic chemistry is fundamental for medical students to study later course very well .one semester course includes lectures, and practices.

Name of Course: College Physics Time of Course: 1<sup>st</sup> Semester. Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 36 Total 36

Course Description:

Physics is to study how nature behaves—from the largest things to smallest ones. In simple terms, physics is to study matter, energy space and time. Physics is the most basic physical science because its principles form the foundation of all the other branches of science, including medical and biological science.

This course is divided into two parts. The first part is about theoretical teaching. The second part concerns the physical experiments. In the theoretical part, students will learn the kinematics of particles, the kinetics of particles, the rotation of rigid bodies, oscillations and waves, fluids, thermodynamics, electrostatics, direct current circuit, magnetic field, electromagnetic induction and electromagnetic waves, geometric optics, the wave properties of light, quantum physics. In the second part, students will complete several experiments so as to raise their ability for experimental technology.

College physics is a very important basic course. After studying the college physics, students should master the basic laws of physics and understand their practical applications, especially in medical and biological fields. Therefore, they will lay a solid foundation for the following courses.

Name of Course: Chinese Language Time of Course: 1<sup>st</sup>-9<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 864
Total 864

Course Description:

Chinese language is a bridge so that foreign students can understand china, solve daily life problems and carry out clinical practice in china. The main teaching objective of the Chinese language course is to make the foreign students acquire the essential language level in both speaking and communication so as to facilitate their life in china or study in higher medical institutions. in addition, the foreign students would apply the language and skills they've learned to solve some common problems in their daily lives, and reach the level of HSK-3.the course involves Basic Chinese, Chinese Listening and Speaking, Chinese Characters, and so on. With the purpose of use and practice, the content of course is designed to put more emphasis on the students' skills of listening and speaking, and then their skills of reading and writing. Meanwhile, the courses introduce some words and phrases related to medical science. Chinese lessons are given by classroom teaching and various practical activities.

Name of course: Organic Chemistry

Time of Course: 2<sup>nd</sup> semester

Distribution of teaching hours:

Course format number of teaching hours

Lecture 54
Experiment 21
Total 75

# Course Description:

Organic chemistry is an important fundamental course for the medical students. It is the study of the compounds of carbon, namely organic compounds. It mainly includes the classification, structure, nomenclature, and physical properties as well as chemical properties of organic compounds. We know that organic compounds are the essential material of which all living things on this planet are made. The research object of medicine is the life process of the human body, which is constituted of living materials. The overwhelming majority of living materials are organic compounds such as saccharides, lipids, proteins and nucleic acids and so on. The metabolic process in humans is a series of organic chemical reactions. The knowledge of organic chemistry is prerequisite to understand clearly these reactions in living organisms at the molecular level.

Name of course: cell biology Time of course: 2 semester Distribution of teaching hours:

Course format number of teaching hours

Lecture on 32
Total cost 32

## Course Description

Cell biology is a subject that focuses on studying the mechanisms and principles of the life and activities of cells. It employs the methods of modern physics, chemistry, and experimental biology at the whole cell, subcellular and molecular levels .in the times 21 century, in which life science and medicine are developing very rapidly, cell biology is a compulsory course for medicine students ,because it is only a pioneering subject in life science but also an important basic course for clinical medicine. The course puts emphasis on the instruction of essential theory, elementary knowledge and fundamental skill. The contents of this course include introduction, cell chemistry, cell membrane, cell junctions, endomembrane system, mitochondria and paroxysms, cytoskeleton, nuclei heredity, cell differentiation, cell aging and death, and studying methods of cell biology. This knowledge will provide a solid foundation for studying other basic and clinical course, such as history, human anatomy, human physiology, biochemistry, genetics, and Molecular biology and so on. This course consists of theory class and practical class.

Name of course: systematic anatomy Time of course:  $1^{st} - 2^{nd}$  semester Distribution of teaching hours:

Course format number of teaching hours

Lecture on 92

Practice 34
Total 126

## Course Description:

The human anatomy is a science dealing with the morphology and structure of the human body. Anatomy is one of the foundational subject in medical study, and one third of medical terms come from anatomy. Gross anatomy can further be divided into systematic anatomy and regional anatomy. Systematic anatomy is subject dealing with morphology and the structure of human body according to system. Systematic anatomy is composed of nine systems: locomotor system, alimentary system, reparations system, Urinary system, eproductive system, endocrine system, vascular system, sensory system, nervous system. The reaching of systematic anatomy is mainly theoretic lecture with multimedia teaching software, the practices include demonstrations with cadavers, regional body specimens and teaching models. The teaching goals are to understand and master the normal shapes and structures of the organs and systems of the human body, and to lay the necessary morphological foundation for the following medical basic courses and clinical course.

Mane of course: regional anatomy

Time of course: 2<sup>nd</sup> semester Distribution f teaching hours:

Course format number of teaching hours

Lecture 21
Practice 69
Total 90

# Course description:

The human anatomy is science dealing with the morphology and structure of the human body. Anatomy is one of the foundational subjects in medical, and one third of medical terms come from anatomy. Gross anatomy can further be divided into systematic anatomy and regional anatomy. Regional anatomy is subject dealing with morphology, structure and adjacent organs of the normal human body according to body parts. Regional anatomy is taught following the systemic anatomy which the students have studied. The teaching of regional anatomy mainly include the students' dissection of the cadavers themselves. Regional anatomy is composed of dissection of six parts: head, neck, thorax, abdomen, upper limb and lower limb. The teaching goals are to understand and master the normal layers, position paper and adjacent organs and structure of the human body. Study of regional anatomy provides the necessary morphological basic for the following clinical medical courses.

Name of course: histology and embryology

Time of course: 2<sup>nd</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture on 56

Experiment on 56 Total cost 112

## Course description:

This course is a science that deals with the microstructure of the human body and its relationship with the body's microstructure and functions it is the meeting -place of anatomy biochemistry and physiology .an understanding of normal microscopic structures is a necessary prelude to the study of pathology .histology serves as a bridge between basic medicine and clinical medicine .the first part of this course describes the four primary tissues and the second part covers the microstructure of organ systems .there are four main kind of tissue :epithelial tissue ,connective tissue ,muscular tissue and nervous tissue .there are eight major systems in the body :nervous system ,circulatory system ,immune system ,respiratory system ,digestive system ,digestive system ,urinary system ,reproductive system and endocrine system .thus the human body may be examined at four structural levels :as cells ,tissues ,oranges and systems .although most medical students are not going to become histologists, a thorough knowledge of histology is fundamental for them as future doctors. Human embryology is a science that is concerned with the beginning and development of the human embryo ,as well as human embryonic developing mechanism, including gametogenesis, fertilization, the relationship between the embryo and the maternal body ,as well as congenital malformation etc. general embryology only deals with the beginning of the embryo and early development of the embryo, including the pre-embryonic and embryonic periods.

Name of course: physiology Time of course: 3<sup>rd</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 84
Experiment 40
Total 124

## Course Description:

Physiology is a sub-section of biology .it is the study of functions in living matter ,to explain physical and chemical factors of life .the course mainly deals with the phenomena that are exhibited by living organisms ,systems ,organs ,tissues or cells .under the normal conditions ,it analyses the mechanisms ,the process of regulations and the relationship between the organs or the systems .though the knowledge of physiology gathered from scientific research and the practice of clinical medicine ,it provides basic principle for medical practices .for a good few medical student the first thing is to learn normal functions of the body and then other aspect .physiology is a basic medical science .

After studying physiology the students must learn the main points of physiology and know the method of the physiology research .also ,the advances of the theory and technology of physiology are necessary for the students .we train the students to deal with medical problems from the point view of physiology and give the students the ability for clinical practice and medical Research .

Content :the subject ,content and method of physiology ,the basic characteristics of living organisms ,functions of regulation ,the basic function of the cell ,electrical activity of

cells .composition and function of the blood ,cardiac physiology ,blood vessel function and heart and vessel activity regulation ,the process of respiration ,respiration regulation .digestive function and nutrients absorption, metabolism and body temperature ,kidney function urine secretion ,neurophysiology ,sensory organs and their functions ,endocrine physiology ,reproductive system and its functions .

Name of course: biochemistry Time of course: 3<sup>rd</sup> semester Distribution of teaching hours:

Course Format Number of Teaching Hours

Lecture86Experiment42Total128

# Course Description:

Biochemistry for medical students is a key course; it is not only biochemical theory connected to the better understanding of medical science, but also techniques play an important role in medical practice. As a medical doctor in the future, a good command of biochemical sciences will certainly promote ones future development. Today the knowledge of biochemistry and molecular biology has penetrated nearly every field of medical science. Our course includes the study of proteins and enzymes, carbohydrates, fatty-acid metabolism, and molecular genetics. This course is designed as a preparation for graduate studies. An advanced biochemical course is organized for long-term studies, which includes other topics such as hormones, cell membranes, the genome and so on.

Name of Course: Medical Genetics Time of Course: 4<sup>th</sup> Semester

Distribution of Teaching Hours:

Course Format

Lecture

36

Experiment

Total

Number of Teaching Hours

12

48

# Course Description:

Medical Genetics focuses on the study of genetic mechanisms and the developmental formation of genetic disease at both the cellular and molecular levels. The aim of this course is to make sure that medical students master the basic principles of genetics. Medical Genetics is one of fast developed subjects in medicine and is a compulsory course for medical students. The topics emphasize basic theory and practical knowledge. The contents of this course includes the cellular and molecular basis of genetics, basic laws of genetics, single-gene disorders, polygenic disorders, inborn errors of metabolism and molecular disease, chromosomal disease, population genetics, birth defects and congenital malformation, cancer genetics and clinical genetics. After the study of genetics, the medical students are well acquainted with knowledge of genetics and will enable

them to become qualified clinical physician in the future. The course will provide a solid foundation for studying other basic and clinical courses.

Name of course: immunology Time of course: 4<sup>th</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 45
Experiment 12
Total 57

## Course description:

Immunology is the study of the tissues and physiological function of the immune system. It explores the process and principles of how the immune system recognizes and eliminates microbes and their components at different levels. It also examines the principles involved in the disease process in order to reach the goal of preventing diseases.

The theoretical topics are designed to present a complete overview of the immuni system, including organs, cells and molecules (antibodies, complement, cytokines and MHC, etc.) the immune response, diagnose, and treatment, prevention and some immune system disease.

The practical studies aim to help students better understand immunologic theory. In order to improve student' ability, they are introduced to the basic immunological experiment (cellular and humeral immunological techniques) as well as newly developed techniques and equipment.

Name of course: medical microbiology

Time of course: 4<sup>th</sup> semester. Distribution of teaching hours:

Course format number of teaching hours
Lecture 54
Experiment 15
Total 69

# Course description:

Medical microbiology is a science of studying a variety of pathogens including opportunistic pathogens, the diseases they cause, diagnostic measures, and principles of prevention and treatment of infection diseases. The purpose of the medical microbiology course is to familiarize the students with those concepts and features of pathogenic microorganisms. The course is divided into three thematic areas: bacteriology, mycology, and virology. The general course is presented in the form of lecture, lab practice, and discussions. Lectures are foundation of the course. Liberation practices are designed to focus on the basic laboratory techniques necessary for the discussions focus on the key points of infectious disease (culture, staining, and laboratory testing for the identification of infection organisms and evaluation of host immune parameters). Discussions focus on the key points of the lectures and exam tutorial. The students are encouraged to examine related materials that are available, such as scientific journals, newspapers, magazines and television programs that relate to course topics, and bring them to the discussion class.

Microbiology class is scheduled two times each week. There are 3-4 classes each time, with a break per 50 minutes.

Name of course: human parasitology

Time of course: 4<sup>th</sup> semester Distribution of teaching hours:

Course format	number of teaching hour
Lecture	32
Experiment	16
Total	48

# Course description:

Human parasitology is one of basic course in the medical curriculum. The goals are for the student to learn the mechanism of parasite pathogenesis, the diagnostic methods and concepts for prevention of parasitoses. Its study is the basis of clinical and prophylactic medicine. The topical contents of human parasitology involve the introduction of the parathology and including of the morphology and pathogenesis including common human parasites, and the diagnostic methods, epidemiology and prevention of parasitoses caused by these parasites. The other part of the curriculum is anthology, which including the introduction of the biology and ecology of the arthropods which transmit diseases, and the ways and nature of the disease they transmit. The practice areas of study include the helminthes, protozoa and arthropods employing a combination of theory and practice. In the practical classes, theoretical parasitology is strengthened and the basic techniques are practiced se as to master the morphological, features of classification and life cycles.

Name of course: pathology Time of course: 4<sup>th</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture72Experiment33Total105

# Course description:

Pathology is one of the basic medical course which covers the etiology, pathogenesis, pathologic changes, results and prognosis of disease. Bases on the morphological changes of the tissue alterations and metabolic abnormalities, pathology illustrates the basic concept related to the occurrence, development and nature of disease and point out their nature.

The content of pathology is divided into two parts: general pathology and systemic pathology. General pathology mainly introduces the common and basic pathologic processes and systems. The course focuses on the most common disease and at the same disease and et the same time involved medical advances.

To improve the capability of the student, methods and theory has been combined with practice

over recent years. In the course of teaching, varioude teaching methods are used to motivate student interest in pathology, including lectures, experiment and CPC(clinical pathology conference)/which effectively improve the understand of the content learn in lectures. If possible, students are taken to view an autopsy.

Name of course: medical psychology

Time of course: 3<sup>rd</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 32 Total cost 32

Course Description:

Medical psychology refers to a behavioral science that deals with the application of psychology in medicine.

This subject concerns two Fields .first ,it provides the basic knowledge of psychology for students ,which covers mental process ,personality ,psychology development of human beings ,and assessment .second ,it focuses on the views on the relationship between mental factors and diseases ,the impact of special psychology and social factors on health ,the relationship of the medical doctor with their patients ,psychotherapy and counseling ,which involves clinical psychology ,and health psychology .At present Medical Psychology is required at medical colleges or universities in china .

Name of course: medical statistics Time of course: 5<sup>th</sup> semester

Distribution of teaching hours:

Course format number of teaching hours

Lecture27Experiment24Total51

Course Description:

medical statistics is an applied course for medical students to learn basic knowledge and principles of statistics and apply it into clinical medicine and medical research .statistics is a branch of science that deals with the art of data collecting ,classifying ,displaying ,analyzing and interpreting results from research .medical statistics is designed to assist the students understand statistical application ,including description of the data and simple statistical inference from sample to population .

Name of Course Pathophysiology

Time of course: 5<sup>TH</sup> semester Distribution of Teaching Hours:

Course Format Name of Teaching Hours

 Lecture
 76

 Experiment
 36

 Total
 112

# Course Description:

As a bridge between basic medicine and clinical medicine, pathophysiology is a discipline that studies the nature of occurrence, mechanism and development of disease focusing on studying the progressive changes of function and metabolism of the body with certain diseases. The course provides the theories related to prevention and treatment of diseases. Pathophysiology teaching is comprised of three parts: summary of disease, basic pathological process, and pathophysiology of various systems. (1) In the summary of disease, we mainly discuss the definition of diseases, the general principle of occurrence and development of diseases such as the causes and condition of diseases, disorders of the regulation of homeostasis in diseases, and results of diseases etc.(2) Basic pathological process refers to the general changes occurring in various organs and systems related to different diseases, such as disorders of water and electrolytes, disturbance of acid-base balance, hypoxia, fever, inflammation, disseminated intravascular clothing, and shock. (3) In pathophysiology of various systems, one of the major contents is the common and general pathological changes in some diseases, such as heat failure, respiratory failure, hepatic encephalopathy, and renal failure. Furthermore, pathophysiology is also an experimental science that includes lectures, experiments with animals, and case analysis.

Name of Course: Pharmacology Time of Course: 6<sup>th</sup> semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 76
Experiment 36
Total 112

## Course description:

Pharmacology is a subject which studies principles of interactions between medicines and organisms (including pathogens). the subject includes pharmacodynamics which is the study of how medicines produce their effects on organisms and pharmacokinetics which is the study of how medicines undergo biotransformation in the body pharmacology is bases on physiology pharmacology and pathogenic organisms these studies lay a solid foundation for clinical course the objectives of pharmacology are to elucidate the mechanism of actions of medicines disease prevention metabolic process adverse reaction routes of administration and compatibility. Therefore pharmacology is an essential course in the clinical medical curriculum.

Name of course: epidemiology

Time of course: 6<sup>th</sup> semester Distribution of teaching hours

Course format number of teaching hours

Lecture on 45
Experiment 9
Total 54

# Course Description:

Epidemiology is an introduction course for medical students to learn general epidemiologic principle and basic knowledge in clinical medicine and public health epidemiology is the study of how diseases are distributed in a population and the possible factors that influence this distribution the students will learn how to describe the disease or health related events and how to design a study to evaluate the factor that may be associated with the diseases or outcome. These methods can be used to deal with the question in areas such as etiology of disease, diagnosis, prognosis, treatment, prevention and evaluation of health services. The course of epidemiology is designed to assist the students to learn the basic knowledge of epidemiology and its applications.

Name of Course: Diagnostics Time of Course: 7<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format		Number of Teaching Hours		
1.	Laboratory diagnostics			
	Lecture	20		
	Experiment	12		
2.	Physical diagnosis			
	Lecture	96		
	Practice	48		
	Total	144		

# Course Description:

## 1. Laboratory diagnostics

The contemporary development of science and technology has made laboratory diagnostics an unavoidable segment of modern medicine. Laboratory diagnostics is a starting point in discovering illness, finding its treatment, and monitoring and curing a sick person. The field of laboratory diagnostics deals with an examination of the blood and other body fluids, to collect data involving their clinical chemistry, coagulation, clinical immunology and clinical microbiology etc. The data are use for diagnosis and management of illness and for the investigation of the mechanisms and pathogenesis of disease.

## 1. Physical diagnosis

Physical diagnosis is most important for clinical practice. Through learning this part ,students should recognize the physical signs of systemic disease, do a preliminary evaluation of their finding and its relationship to the management of their patient, understand the basic techniques in procuring a medical history and in performing a physical examination of the patient and organize

data and correctly assess the patient's physical status

Course: General surgery
Time of course: 8<sup>th</sup> semester
Distribution of teaching hours:

Course format number of teaching hours

Lecture on 70
Practice 42
Total cost 112

# **Course Description**

This course is a basic course of clinical surgery, with the objectives to introduce anatomical aspects of surgical operations, to master the basic operative techniques and methods of common operations, to lay a foundation for surgery and related courses, including necessary theory and practice. Through this course the student should: (1) master the layer anatomy used in common operation, relative structure and clinical significance; (2) master aseptic techniques and basic operative techniques; (3) master the basic steps and attention point of common surgical operation.

25.

Course name: internal medical Time of course: 8<sup>th</sup> and 8<sup>th</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 108 Practice 36

Total 144

# Course description:

This course offers a 2-semester learning program in internal medical. The program designed to provide practical and didactic education in the broad field of internal medical. All of the major internal medical subspecialties are taught by qualified faculty. Each student has an opportunity to become proficient in all procedures common to the internist. On the basic of handling the basic medical knowledge, the major task is to know how to diagnose, make differential diagnosis and treat the common internal medical diseases. This subject also focuses on the adult patient population by concentrating on in-depth evaluation and ongoing treatment of patient with complex problem and / or chronic illness. We will cultivate and foster the professional development of students to become doctors respective to the needs of the community as well as the individual patient.

## Respiratory system

Respiratory system is one of the most important parts of internal medical. This part includes 20 teaching hrs for lectures and 6 hrs for practice. This part can provide a solid understanding and knowledge of the structure and function of the respiratory system, provide an understanding of the mechanism of common respiratory disease and their treatment, enable student to become aware of

the public health issues e.g. cigarette smoking, environmental pollution, primary health care, disease prevention related to the respiratory system and foster the professional development of students to become doctors responsive to the needs of the community as well as the individual patient.

## Circulatory system

Circulatory system is an important branch of internal medicine, which is concerning the structure and functional disorder in heart and vessels. This course includes cardiomyopathy, hypertension, coronary artery disease, myocarditis, heart failure, arrhythmia, pericardial disease, endocarditic and alular heart disease. Among them, coronary artery disease, arrhythmia and heart failure make progress most rapidly. Through the study, the students should: 1.master the diagnosis and medication for hypertension; diagnosis, therapeutic principle and complication of angina pectoris and myocardial infarction; diagnosis and medication for heart failure; electrocardiogram and therapeutic principle of arrhythmic emergency. 2. understand the manifestation of cardiomyopathy, pericardial disease, alular heart disease, some kind of arrhythmia, and some new progresses in coronary artery, arrhythmia therapy, for example interventional therapy.

# Endocrinology

Endocrinology is an important system of internal medicine. The aims of endocrinology are to learn the Principles and methods for diagnosis and management of diseases, such as hyperthyroidism, hypothyroidism, diabetes mellitus, primary chronic hyperthyroidism and hypothyroidism. In lecture hours students learn diagnosis and management of common endocrinology disease such as hyperthyroidism, hypothyroidism, diabetes mellitus, primary chronic hypothyroidism and hypothyroidism. During practice hours students learn the following clinical skills: collecting history of endocrinology, taking physical examination and writing the history. Students also learn to handle the following endocrine diseases, such as hyperthyroidism, hypothyroidism, diabetes mellitus, primary chronic hyperthyroidism and hypothyroidism.

## **Nephrology**

Nephrology is part of internal medicine and clinical basic course. Because of the close correlation between the Nephrology and other internal medicine, the students should not only grasp the basic theory prior to learning the etiology and pathogenesis of the urologic system, but also know the order to be in intern. The courses mainly consist of the diagnosis and therapy of the common disease, including primary glomerular disease, secondly glomerular, urinary tract infection, acute renal failure, chronic renal failure and dialysis therapy.

#### Gastroenterology

The main goal when teaching the digestive system is to enable the students to integrate theory and practice .with basic theoretical knowledge, students can relate the theoretical concepts in fundamental areas such as physiology, pathology, physiopathology, pharmacology, and diagnostics, with clinical procedures for treatment of common disease of the gastrointestinal tract. The interaction, developing the compound ability of comprehension, and forming the clinical idea will be trained, to make a solid foundation for further clinical work. The subject includes the etiology, pathogenesis, diagnosis, therapy, prognosis and novel development of treatment for common

disease of the gastrointestinal tract such as peptic ulcer, inflammatory bowel disease, irritable bowel syndrome, cirrhosis, liver cancer and hepatic encephalopathy, etc.

# Hematology and oncology

Learn the diagnosis and therapy of common hematological diseases. Know about the new development and trends of hematology .lecture :1.learn the basic knowledge of hematology, including hematopoietic tissues and their functions, differentiation and development of blood cells ;2.learn the diagnosis and treatment of common hematological diseases (1)RBC disease :various kinds of anemia ,including general aspects of anemia ,iron deficiency anemia, aplastic anemia, hemolytic anemia, etc ;(2)WBC disease :leucopenia and agranulocytosis; myelodysplastic syndrome ;acute and chronic leukemia; lymphloma ;multiple myeloma ;(3)hemorrhagic diseases :idiopathic thrombocytopenic purpura. Practice: Learn the following clinical skills: Collecting the history of hematological disease; Do physical examination; Know the common hematological laboratory tests; Know differentiations of similar hematological disease; Know the treatment of some kinds of hematological disease.

#### Rheumatic disease

Rheumatic disease of the musculoskeletal system are common, disabling ,and costly to the economy. This course provides an introduction of standard diagnosis and treatment of the patient with rheumatic symptoms through study of essential feature and diagnostic methods. There's 6hrs for learning the course.

# Name of course: Surgery

Time of course: 9<sup>th</sup> and 8<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format

Lecture

Practice

Total

Number of teaching Hours

30

96

# Course description:

On the basis of handling the basic medical knowledge, it is major task to know how to diagnose, make differential diagnosis and treat the variant diseases. And the characteristic of this subject is to learn the indications and contraindications of operation and how to deal with the postoperative complications. To meet the teaching aim, the students should grasp the related contents in the subject and master the aseptic technique and basic operational skills. What's more, you need cultivate fine medical ethics and strive to serve the patients' heart and soul during the clinical work.

# General surgery

In this course, the surgical diseases in abdomen, neck, breast and peripheral vessels will be taught. The concrete contents include aetiology, path physiology, clinical manifestation, diagnosis, treatment etc. during the process; the students should master the principles of diagnosis and management of common general surgical diseases and be acquainted with the indications and contraindications of operation and the perioperative management. At the same time, the basic

surgical skills will be trained.

## Cardiothoracic surgery

Cardiothoracic surgery is an important part of surgery and includes diseases of the heart and lung. It's related to basic functions of the human body, such as respiration and circulation. This subject introduces etiology, pathology, pathophysiology, clinical presentation, diagnosis and differentiation, management principles, surgical treatmentand prognosis of cardiothoracic diseases. One part, general thoracic surgery, includes chest injury, disease of chest wall and pleura, empyema, Mediastinal disease, carcinoma of esophagus and cardia, lung cancer and benign pulmonary disease, aortic dissection and Pericarditis, etc. Teaching time includes lectures and clinical practice. Students should know some diagnosis and management principles of common cardiothoracic diseases and have the clinical skill to collect the history of disease and perform physical examination of the chest.

# Urology

Urology is one of the important branches of clinical surgery. It includes adrenal gland, kidney, ureter, bladder, prostate, urethra and male genitalia. It involves the urology of malformation, inflammation, calculus, tumor, male sexual dysfunction, and other fields about pediatric urology and female urology. In recent year, urology has developed rapidly following new techniques: extracorporeal shock wave lithotripsy(ESWL), percutaneous renal artery dilation ,dialysis and renal transplantation .the subject of urology is to learn basic knowledge of urology ,including structure and function of urinary system symptoms ,sings diagnosis and treatment of urinary disease, eg. The common diseases include injury ,infection ,calculus ,and neoplasm ,etc .

## Orthopedics

Orthopedics is the clinical science related to diseases of the musculoskeletal system .this subject will be taught with the combination of lecture clinical practice .the clinical students should learn the basic concepts and principles of bone surgery .the lectures will be given in several sections including traumatic surgery of bone and soft tissue ,infective diseases ,osteopathy ,and bone tumor .with the aid of the teachers ,students should understand the definitions ,pathology ,clinical manifestation ,and the treatments of common diseases in the musculokeletal system .also the commonly used diagnostic skills and techniques for clinical therapy should be well understood and tested in the clinical practice .

Name of Course: stomatology Time of Course: 10<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture36Practice12Total48

### Course of Description:

Stomatology is an integral part of medical science. It is a science that studies the diseases of odontal, paradental and maxillofacial soft hard tissue, studies the relationship between general diseases and lesions of this tissue, and studies the prevention and treatment of these diseases. This

subject covers the fundamental theories of stomatology and it makes the students aware of the common diseases of this field and the oral lesions of systemic diseases. The requirements of the course are: be familiar with oral and maxillofacial physiology, to settle fundamental knowledge for studying stomatology; Be familiar with outpatient medical history and the common examination method of stomatology; Master the emergency treatment of pulpitis, master the common method of oral anesthesia and skill of extraction of common teeth; Know the prevention and treatment knowledge of odontal, paradental and oral mucosal common diseases; Know the initial diagnosis and emergency treatment principle of oral and maxillofacial infection, injury, common diseases of temporo-madibular, diseases of salivary gland and oral tumor in order to send patient to the special department for consultation in time and not miss the opportunity for treatment.

Name of Course: Radiodiagnosis Time of Course: 7<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 48
Practice 48
Total 96

## Course Description:

Our aim is to cultivate students' ability of handing the major aspects of medical imaging, including basic theory, knowledge and skills. It is composed of general introduction and specific introduction. The introduction recommends the following

aspects—the basic principle and equipments of all the imaging technology, topography characteristics, examining technology, methods of analysis and diagnosis, the value and limits of their clinical application and the information imaging which has developed in the resent years. Special introduction introduces the normal and abnormal imaging manifestation through different techniques of several aspects which include respiratory system, cardio-vascular system, gastrointestinal system, urinary tract, musculoskeletal imaging, neurological imaging, interventional and invasive radiology and so on. It also gives an account of imaging diagnostic methods of typical and common diseases.

Name of Course: Ophthalmology Time of Course: 10<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 36 Practice 12 Total 48

## Course Description:

Ophthalmology is a special medical science, a branch of clinical, which deals with research for development, treatment and prevention of the disorders of visual organs (including eyeball and its accessory apparatus, visual pathway as well as visual center). Ocular diseases have close relation to systemic ones. Learning ophthalmology and understanding its development and present state are helpful to establish foundations of clinic, teaching and science research. On the basis of handling the basic medical knowledge, it is a major task to know how to diagnose, make differential diagnosis and treat the variant diseases, and to learn indications and contraindications of operation and how to deal with the postoperative complications. To meet the teaching aim, the students should grasp the related contents in the Course Format and master the aseptic technique and basic examination skills.

Name of Course: Traditional Chinese Medicine

Time of Course: 5<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 96 Total 96

## Course Description:

Traditional Chinese Medicine (TCM), an integrated subject system having unique theoretical style, belongs to the category of life sciences. It is an important content of the culture and quality-oriented education. This course is divided into three parts. The first part: know the humanities background and the philosophical idea of the development of TCM. It emphasizes the holism conception and the idea of treatment based on syndrome differentiation. The second part: learn basic theories of TCM. The main contents include the view of life and disease, diagnosis, the method of dialectical method, the theory of prevention and treatment, Chinese traditional herbs and prescriptions. The last part: learn acupuncture and *Tuina*.

Through introducing the doctrine of main and collateral channels, students should master and understand the concepts, contents, the principles and the value of clinical application. Through learning TCM, the medical students should understand that different medical systems have different cognitive styles, enrich the clinical technique of diagnosis and treatment, widen the visual filed and lay the foundation for further TCM studies.

Name of Course: Medical Ethics Time of Course: 3<sup>rd</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 36 Total 36

## Course Description:

Medical ethics is an inter-disciplinary subject bridging ethics and medical science. It is also a science to study and solve the problems of physician-patient relationship existing in the medical care with theory and method of ethics. Medical ethics reveals the moral tradition in medicine at home and abroad, and the ethical essence in the medical care. In addition, medical ethics studies the relationship between medical workers and patients, and between medical institutions and human society, the fundamental ethical principles and category, the medical workers' moral standard and ethical problems of incorporating new technologies into the medical practice, the life-and-death ethical problems and ethical problems existing in the clinical medical care.

Name of Course: Introduction to Forensic Medicine

Time of Course: 6<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 30
Practice 6
Total 36

# Course Description:

This course is an introduction to the science of forensic medicine. Forensic medicine is a branch of medicine and pathology that often deals with medical topics that are related to legal investigations concerning medical cases. This specialty also deals with medical surveillance and maintenance of public health.

This introductory course provides an overview of several important forensic topics, including: death certification, evaluation of forensic evidence, introduction to use of forensic information in court procedures, role of autopsy, time of death and post-mortem changes, sudden death, infant deaths, death or injury due to crimes, several important categories of environmental and mechanical injury, forensic toxicology, forensic serology, forensic psychiatry and use of DNA evidence.

Class time will include lectures, discussions, and practice questions to test the student's understanding. The course will not include pathology laboratory time, as it is an overview that is aimed at the level of skill and expertise of general medical students. For those students that pursue this specialty as a career, further study of the area in detail can be done during specialty training in forensic pathology.

Name of course: Neurology

Time of course: 10<sup>th</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 36
Practice 12
Total 48

# Course description:

The focal point of lecture is taking the history of neurological systemic diseases, physical examination method, symptom and sigh of common diseases. To learn topical diagnosis of neurological disease, course must be applied to clinical needs. it mainly introduces etiology, pathology, clinical features, diagnoses, distinguish diagnosis and trieatmet of common and frequently occurring disease, especially cerebrovascular diseases, bell palsy, acute inflammatory demyelinating polyneuropathy, acute myelitis, herpes simplex virus encephalitis, multiple sclerosis, parkinson's disease, epilepsy, headache, mortor neuron disease, alzheimer disease, myasthenia gravis, progressive muscular dystrophy, periodic paralysis, etc. the purpose and significance of auxiliary examination will be explained such as cranial CT, MRI of spinal cord and cranium, EEG, EMG and TCD. The course introduces the progress and development of present technique for diagnosis and treatment of concrete disease at home or abroad. The diagnosis and treatment of neurogical critical ill like brain herniation, crisis of myasthenia gravis, respiratory failure of acute inflammatory demyelinating polyneuropathy will be lectured.

Aims of the neurosurgery education for undergraduates are to teach basic knowledge, skill and attitude to treat common neurosurgical diseases at the primary care level. Emphasis will be laid on the basic concepts, diagnosis method s and treatment of head trauma, cerebrovascular diseases, brain and spinal tumor. At the end of the course, the student shall be able to describe basic concepts, principle of diagnosis and management of common neurosurgical problems.

Name of Course: Nuclear Medicine

Time of course: 6<sup>th</sup> Semester Distribution of teaching hour:

Course Format Number of teaching Hours

Lecture 36 Total 36

# Course Description:

Nuclear medicine deals with the application of radio-isotopes and their related emitting rays in clinical medicine for diagnosis or therapy of diseases as well as research purposes. Using isotope labeled substance as tracer or pharmaceuticals. Clinical nuclear medicine is a unique and growing medical specialty that contributes most significantly to our understanding of the functional changes which accompany disease. It remains true to the very essence of functional imaging which characterizes the field of nuclear medicine and distinguishes it from the more morphologically based radiological imaging procedures. Both the diagnostic and the therapeutic aspects of nuclear medicine rely for their efficacy on the physiological changes produced by disease. Today nuclear medicine is one of the medical specialties with great opportunities for

innovation and creative thinking .it will be most profitably used when both researcher and practicing physicians have taken the times to understand the pathophysiology basis of scintigraphy and radio –nuclide therapy.

Name of course: rehabilitation medicine

Time of course: 10<sup>th</sup> semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 36
Practice 12
Total 48

## Course description:

In pace with the change and development of the concept of health and the mode of medicine, the rehabilitation medicine as the fourth of medicine has been included in the comprehensive medicine medicine should not only treat the diseases and save the life, but also pay more attention to the living quality of the sufferers rehabilitation medicine is a young medicine subject, it is a independent medical system with specific character, category, theoretic foundation and special technique for diagnosis and treatment, the students should learn and master the method of surgery and medication and other effective and varied rehabilitation treatments, the content of the rehabilitation course include: the concepts Of rehabilitation, organization of rehabilitation and its services, the essential knowledge of the rehabilitation assessment and treatments, the rehabilitation of patients with clinical familiar diseases or disability.

Name of Course: Infectious disease Time of Course: 10<sup>th</sup> Semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 36
Practice 12
Total 48

# Course Description:

The contagious disease or infection disease is one of the important courses of the internal medicine and clinical medicine. In recent years, the concepts of contagious disease shifted towards the infectious disease have been extensively stuied. So we prefer to name the course "The infectious disease". After the study of this course, the student should know the following points of infectious disease: (1) The diagnosis, the management and the prophylaxis of the "classic contagious disease". (2) The pathogenic micro-organism and the clinical feature of the "modern infectious disease", including the hospital and community acquired infection. (3) The evolution and the trends of antibiotic resistance among pathogenic micro-organisms. (4)The control of nosocomial infection and the principle by which appropriately use antibiotics in clinic. After the

course, the students should be aware of ways to control new infectious disease with a high risk of spreading rapidly.

Name of Course: Obstetrics and Gynecology

Time of Course: 9<sup>th</sup> Semester Distribution of teaching hours:

Total

Course format	Number of teaching hours
Lecture	86
Practice	42

128

## Course description:

Obstetrics and gynecology is a science dealing with the essential OBGYN knowledge, including structure and function of the female reproductive system, symptoms and signs of OBGYN conditions. Obstetrics and gynecology is one of the clinical subjects in medical study. The teaching goals for students are to master diagnosis and management of antenatal, intranatal and postnatal period of normal and abnormal pregnancy, to provide adequate care for common gynae problems and emergencies, to manage common gynae problems and emergencies, to provide counseling and delivery of fertility regulation methods and acquire knowledge of methods of contraception (male & female ) and medical terminal of pregnancy-safe abortion-select of cases, technique & management of complication of medical and surgical procedures.

Course of name: pediatrics Time of Course: 8<sup>th</sup> semester Distribution of Teaching Hours:

Course Format Number of Teaching Hours

Lecture 86
Practice 42
Total 128

## Course Description

Because the patients are ingenuous children, Pediatrics is a special course. We demand that students learn clinical manifestations, diagnosis and treatment of pediatrics common diseases, on the basis of enhancing students' medical knowledge and skills to serve needs of children with compassionate hearts. The content of the course includes growth and development, nutrition & its disorders ,the newborn diseases ,immunodeficiency ,digestive diseases ,respiratory tract disease cardiovascular diseases , kidney diseases , hematologic disorders , neurologic disorders; endocrine disorders and tuberculosis .

Name of Course: Otolaryngology Time of Course: 10<sup>th</sup> Semester Distribution of Teaching Hours: Course Format Number of Teaching Hours

Lecture on 36
Practice of 12
Total 48

### Course description:

Otolaryngology is one of clinical subject, investigating the anatomy, physiology, and disease of the ear, nose, throat, trachea, esophagus, and their relationship with the rest of body. The subject of Otolaryngology is one of many specialty areas of clinical medicine, involving both medical and surgical management of problems in the head and neck: Student should learn the anatomy and physiology of ear, nose and throat; and be familiar with typical clinical presentation, key physical findings, initial treatment, and referral indications for common otolaryngology diseases.

Name of course: Emergency Medicine

Time of Course: 10<sup>th</sup> semester Distribution of Teaching Hours

Course Format Number of teaching Hours

Lecture 36
Practice 12
Total 48

## Course description:

Emergency medicine is a recently formed medical specialty that focuses on the rapid diagnosis of emergency or critical diseases and on the immediate treatment to prevent death or further disability .make students to form the clinical idea of emergency disease and create a solid for further clinical work .the course is divided into 6main sections (1)diagnostic and therapeutic of Emergency care (2)medical emergencies ;(3)environment emergencies ;(4)toxicologic emergencies ;(5)other emergencies (6)pharmacotherapy of emergency care .the important part of this clinical medical science is the clinical practice at hospital where there is extensive contact with patients .after completing this subject ,students should understand the basic theory of some important emergencies and treatment .

Name of course: psychiatry Time of course: 10 semester Distribution of teaching hours:

Course format number of teaching hours

Lecture 36
Practice 12
Total cost 48

#### Course description:

Psychiatry is an important branch of clinical medicine .as the bio-psycho-social medical model took the place of biomedical model ,mental health had been paying it more attention .psychiatry is a science of studying the etiology ,pathology ,manifestation ,prognosis ,treatment and prevention of psychosis and other mental disorders .the lessons are given to introduce different mental

disorders ,such as schizophrenia ,mood disorder ,personality disorder ,psychiatric disorder of childhood and adolescence and so on .besides theory lessons ,the important branch of this clinical medical science is the clinical course at hospital where there is extensive contact with patients .after completing this subject ,students should understand the basic theory of some important mental disorders and their treatments .