

# 临床医学专业 2020 级本科人才培养方案

## 一、专业基本信息

学科门类：	医学	专业代码：	100201K
授予学位：	医学学士	标准学制：	五年
毕业学分要求：	238 学分		

## 二、培养目标和预期结果

以医学教育国家标准为基准，培养能够适应新时代医药卫生事业发展需要，具有高尚的职业道德素养、良好的公众健康知识和社会责任担当意识、广泛的人文社会学科知识、扎实的医学相关自然学科知识、坚实的医学专业基础知识和基本技能，具备基本的医学科研实践能力和较强的临床实践能力、终身学习能力、创新潜能的临床医学专门人才。

本专业毕业生具有如下目标预测：（1）能够掌握和理解生物医学、预防医学、行为和社会科学、临床医学的相关知识与技能，具备行医所需要的终身学习能力和胜任医生多重角色的职业素质；（2）能够为毕业后进一步发展做好充分的准备。

## 三、培养要求

### （一）立德树人

1. 树立正确的世界观、人生观、价值观，热爱祖国，忠于人民，遵纪守法。
2. 树立“敬佑生命、救死扶伤、甘于奉献、大爱无疆”医者精神，愿为祖国卫生事业的发展 and 人类身心健康奋斗终生。
3. 树立大健康理念，始终以人民健康为导向，努力提升综合素养和人文修养，做党和人民信赖的好医生。

### （二）科学和学术领域

4. 具备自然科学、人文社会科学、医学等学科的基础知识和掌握科学方法，并能用于指导未来的学习和医学实践。
5. 能够应用医学等科学知识处理个体、群体和卫生系统中的问题。

6. 能够描述生命各阶段疾病的病因、发病机制、自然病程、临床表现、诊断、治疗以及预后。
7. 能够获取、甄别、理解并应用医学等科学文献中的证据。
8. 能够掌握中国传统医学的基本特点和诊疗基本原则。
9. 能够应用常用的科学方法，提出相应的科学问题并进行探讨。

### **(三) 临床能力领域**

10. 具有良好的交流沟通能力，能够与患者及其家属、同行和其他卫生专业人员等进行有效的交流。
11. 能够全面、系统、正确地采集病史。
12. 能够系统、规范地进行体格检查及精神状态评价，规范地书写病历。
13. 能够依据病史和体格检查中的发现，形成初步判断，并进行鉴别诊断，提出合理的治疗原则。
14. 能够根据患者的病情、安全和成本效益等因素，选择适宜的临床检查方法并能说明其合理性，对检查结果能做出判断和解释。
15. 能够选择并安全地实施各种常见的临床基本操作。
16. 能够根据不断获取的证据做出临床判断和决策，在上级医生指导下确定进一步的诊疗方案并说明其合理性。
17. 能够了解患者的问题、意见、关注点和偏好，使患者及其家属充分理解病情；努力同患者及其家属共同制订诊疗计划，并就诊疗方案的风险和益处进行沟通，促进良好的医患关系。
18. 能够及时向患者及其家属/监护人提供相关信息，使他们在充分知情的前提下选择诊疗方案。
19. 能够将疾病预防、早期发现、卫生保健和慢性疾病管理等知识和理念结合到临床实践中。
20. 能够依据客观证据，提出安全、有效、经济的治疗方案。
21. 能够发现并评价病情程度及变化，对需要紧急处理的患者进行急救处理。
22. 能够掌握临终患者的治疗原则，沟通患者家属或监护人，避免不必要的检查或治疗。用对症、心理支持等姑息治疗的方法来达到人道主义的目的，提高

舒适度并使患者获得应有的尊严。

23. 能够在临床数据系统中有效地检索、解读和记录信息。

#### **(四) 健康与社会领域**

24. 具有保护并促进个体和人群健康的责任意识。

25. 能够了解影响人群健康、疾病和有效治疗的因素，包括健康不公平和不平等的相关问题，文化、精神和社会价值观的多样化，以及社会经济、心理状态和自然环境因素。

26. 能够以不同的角色进行有效沟通，如开展健康教育等。

27. 解释和评估人群的健康检查和预防措施，包括人群健康状况的监测、患者随访、用药、康复治疗及其他方面的指导等。

28. 能够了解医院医疗质量保障和医疗安全管理体系，明确自己的业务能力与权限，重视患者安全，及时识别对患者不利的危险因素。

29. 能够了解我国医疗卫生系统的结构和功能，以及各组成部门的职能和相互关系，理解合理分配有限资源的原则，以满足个人、群体和国家的健康需求。

30. 能够理解全球健康问题以及健康和疾病的决定因素。

#### **(五) 职业素养领域**

31. 能够根据《中国医师道德准则》为所有患者提供人道主义的医疗服务。

32. 能够了解医疗卫生领域职业精神的内涵，在工作中养成同理心、尊重患者和提供优质服务等行为，树立真诚、正直、团队合作和领导力等素养。

33. 能够掌握医学伦理学的主要原理，并将其应用于医疗服务中。能够与患者及其家属、同行和其他卫生专业人员等有效地沟通伦理问题。

34. 能够了解影响医生健康的因素，如疲劳、压力和交叉感染等，并注意在医疗服务中有意识地控制这些因素，同时知晓自身健康对患者可能构成的风险。

35. 能够了解并遵守医疗行业的基本法律法规和职业道德。

36. 能够意识到自己专业知识的局限性，尊重其他卫生从业人员，并注重相互合作和学习。

37. 树立自主学习、终身学习的观念，认识到持续自我完善的重要性，不断追求卓越。

## 四、修业年限

1. 本专业学制五年；
2. 时间分配：基础阶段课程和临床阶段课程的教学时间各 2.5 年。

学年	第一学年		第二学年		第三学年		第四学年		第五学年	
学期	1	2	3	4	5	6	7	8	9	10
课程 模块	公共基础课程		生物医学课程；预防 医学课程			临床医学课程（含毕业实习）				
	人文社会科学课程（含实习人文素质教育）									
综合 素质	早期接触临床（临床导师）；科研方法与实践（双导师）；医学英语； 创新实践环节（双导师）									
	通识教育选修课		基础类选修课			临床类选修课			毕业综合考核	

## 五、主干学科和主要课程

### （一）主干学科

基础医学、临床医学

### （二）主要课程

1. 人文社会科学和自然科学课程：思想道德修养与法律基础、中国近现代史纲要、毛泽东思想和中国特色社会主义理论体系概论、马克思主义基本原理、形势与政策、医用高等数学、医用物理学、基础化学、有机化学、计算机文化基础、大学英语、体育、医学心理学、医学伦理学等。

2. 生物医学课程：系统解剖学、组织学与胚胎学、生理学、生物化学与分子生物学、医学遗传学、医学免疫学、医学微生物学、人体寄生虫学、局部临床解剖学、药理学、病理生理学、病理学、基础医学整合案例研讨等。

3. 预防医学课程：医学统计学、预防医学（含流行病学）、全球卫生与健康概论等。

4. 临床医学课程：检体诊断学、实验诊断学、影像诊断学、外科学总论与动物手术学、内科学、外科学、妇产科学、儿科学、急诊医学、神经病学、精神病学、传染病学、康复医学、核医学、中医学、眼科学、耳鼻咽喉与头颈外科学、口腔科学、皮肤性病学、临床医学综合病例研讨、毕业实习等。

## 六、课程设置

1. 必修课：222 学分，93 门（人文社会科学课程 14 门，公共基础课程 11 门，生物医学课程 30 门，预防医学课程 4 门，临床医学课程 32 门，创新实践环节 2 门）。

2. 选修课：16 学分（通识教育选修课 6 学分，基础类选修课 5 学分，临床类选修课 5 学分）。

### 3. 各类课程分配比例

人文社会科学课程 23 学分，460 学时， 占总学分比例 9.7%；

公共基础课程 32 学分，700 学时， 占总学分比例 13.4%；

生物医学课程 59.5 学分，1160 学时， 占总学分比例 25%；

预防医学课程 8.5 学分，144 学时， 占总学分比例 3.6%；

临床医学课程（含毕业实习）95 学分，1316 学时， 占总学分比例 39.9%；

创新实践环节 4 学分， 占总学分比例 1.7%；

选修课 16 学分，160 学时， 占总学分比例 6.7%。

## 七、教学基本要求及教学方法

### （一）思政教育

将思想政治工作融入各项教育教学过程。按照立德树人的培养要求，加强课程思政教育，寓价值塑造、医者精神和健康理念于知识传授和能力培养之中；加强“课程思政”课堂教学改革，转变教学理念，改进教学设计，构建课程思政教学典型案例。

### （二）人文社会科学和自然科学课程教育

优化通识教育的课程设置，打造体现办学优势特色的精品选修课程，使学生具备良好的社会人文素养，提高学生综合素质。重视沟通交流能力培养，在基础阶段侧重人际交往能力，在临床阶段以医患沟通实践为主。切实加强医学相关数学、物理、化学、计算机与信息学的教学，使学生具有较坚实的自然科学基础，以适应现代医学与智慧医学技术发展的需要。

### （三）专业教育

1. 加强英语教学。采取大学英语、基础阶段专业英语、临床阶段专业英语分级教学的形式，因材施教。要求通过大学英语四级考试。

2. 改革教学方法，体现以学生为中心的教育教学理念。基础医学和临床医学主干课程实施 30-35 人小班化授课，教学中重视理论讲授与实验教学相结合，在提高课堂授课和床旁教学的教学质量基础上，倡导“教师布置问题及引导、学生自主讨论学习、学生分析演示汇报及教师点评”为主要特征的小组讨论教学模式。开设《基础医学整合案例研讨》《临床医学综合病例研讨》《临床诊断思维训练》等课程，引导、激发学生的主动学习意识，培养学生的自主学习与分析判断能力，加强综合素质培养。

3. 加强“双导师”特色，贯穿培养全过程。主要包括三个方面：由基础和临床双导师共同指导完成基础与临床阶段的《科研方法与实践》课程；由基础导师指导完成创新创业训练项目；由临床导师指导完成《早期接触临床》课程。将科学方法原理、医学研究方法教育贯穿整个人才培养过程。

4. 注重加强实验教学和临床实践教学。在实验教学中，在保证基本的验证性实验的前提下，开展《形态学综合实验》《机能学综合实验》教学，同时通过双导师平台向学生提供开放实验的机会。培养和提高学生实际动手能力，分析问题和解决问题的能力。在临床实践中，充分保证见习和实习，开展《早期公共卫生实践》《早期接触临床》《临床基本技能训练》《临床综合技能训练》教学，在实习前进行水平测试，实习中进行出科考核，实习后进行毕业综合考核，加强实践，在实践中学习提高临床工作的能力。

## **八、毕业与学位授予**

### **（一）课程考核**

所有课程均进行考核，考核分考试、考查两种形式。积极倡导形成性评价和终结性评价相结合的考核方式，评价方式涵盖课堂讨论、平时作业、阶段测验、实验设计与操作、实验报告、上机实践、实习实践、技能考核等学习过程，以实施的教学大纲为依据，测试学生的分析、综合、解决问题的能力。

### **（二）毕业综合考核**

于毕业前进行毕业综合考核，考试内容包括专业综合理论考试、临床综合技能考核和毕业综合报告。考察学生对专业知识的理解和应用能力、临床技能操作水平、临床思维、科研思维、分析问题和解决问题的能力。

考核项目		科目	考核方式
专业综合理论考试		内科、外科、妇儿科	笔试
临床综合 技能考核	OSCE	13 站	笔试、仿真模型、SP
	计算机模拟 病例考试	内科、外科、妇产科、儿科	在线网络考试
毕业综合报告		基础研究报告	毕业综合报告及答辩
		临床病例报告	

### (三) 毕业与学位授予

学生完成 238 学分的课程学习并且考核合格，其中包含必修课 222 学分，选修课 16 学分，符合学校毕业的相关管理规定者准予毕业，并颁发医学专业本科毕业证书；符合学校学位授予规定者，授予医学学士学位。

## 九、教学进程表

# **Clinical Medicine (Five-year Schooling) Major 2020**

## **Undergraduate Talent Training Program**

### **I . Basic Information**

Discipline:                      Medicine    Major Code:   100201K  
Degrees Conferred:   Bachelor of Medicine                      Duration:           Five years  
Requirements for Graduation Credits:   238 credits

### **II . Educational Objectives and Learning Outcomes**

Based on the national standards of medical education, cultivate students with noble professional ethics, good public health knowledge and sense of social responsibility, extensive knowledge of Humanities and Social Sciences, solid knowledge of medical related natural disciplines, solid medical professional basic knowledge and basic skills, to meet the developing needs of medical and health undertakings in the new era, and cultivate clinical medical professionals with practical ability, strong clinical practice ability, lifelong learning ability and innovative potential.

Graduates should acquire the following target prediction:(1) be able to master and understand the relevant knowledge and skills of biomedicine, preventive medicine, behavioral and social sciences, and clinical medicine, and have the lifelong learning ability and professional quality of being competent for multiple roles of doctors; (2) be able to make full preparation for further development after graduation.

### **III. Educational Requirements**

#### **( I ) Moral Education and Character Cultivation**

1. Establish scientific outlook on world, life and values, love the motherland, loyal to the people, abide by discipline and law.
2. Establish the doctor spirit of "respecting and protecting life, rescuing the wounded, being willing to contribute, and loving boundless", and be willing to strive for the



development of health service in our country and the physical and mental health of human beings.

3. Establish the concept of Great Health, always take the people's health as the guidance, strive to improve the comprehensive quality and humanistic accomplishment, and be a good doctor trusted by the party and the people

**(II) Science and Scholarship: the medical graduate as a scientist and a scholar**

4. Possess the fundamental knowledge of the disciplines such as natural sciences, humanities and social sciences and medicine, and apply scientific methods, which will be applicable in future study and medical practices.

5. Apply medical and scientific knowledge to individual patients, populations and the health systems.

6. Describe the etiology, pathology, natural history, clinical features, diagnosis, treatment and prognosis of common presentations at all stages of life.

7. Access, critically appraise, interpret and apply evidence from the medical and scientific literature.

8. Master the basic features of traditional Chinese medicine and its basic principle of diagnosis and treatment.

9. Apply knowledge of common scientific methods to formulate relevant research questions.

**(III) Clinical Practice: the medical graduate as a practitioner**

10. Conduct effective communications with patients, their family members, colleagues and health professionals of other disciplines.

11. Take a medical history in a proper, comprehensive and systematic way.

12. Perform a full and accurate physical examination, including a mental state examination, and write medical records as required.

13. Integrate and interpret findings from the medical history and examination, to arrive at an initial assessment including a relevant differential diagnosis. Discriminate between possible differential diagnoses and propose rational management principles.

14. Select and justify common investigations, with regard to the pathological basis of disease, utility, safety and cost effectiveness, and interpret the results.

15. Select and perform a range of common procedures safely.
16. Make clinical judgements and decisions based on available evidence. Identify and justify relevant management options under the guidance of supervising physicians.
17. Understand patients' questions, views, concerns and preferences, and ensure patients' full understanding of their situations and options. Involve patients in the decision-making and planning of their treatments, including communicating risks and benefits of management options.
18. Provide information to patients, and family carers where relevant, to enable them to make fully informed choices among various diagnostic, therapeutic and management options.
19. Integrate prevention, early detection, health maintenance and chronic disease management where relevant into clinical practices.
20. Prescribe medications safely, effectively and economically based on objective evidence.
21. Recognise and assess deteriorating and critically unwell patients who require immediate care. Perform common emergency and life support procedures.
22. Describe the principles of end-of-life care for patients, avoiding unnecessary investigations or treatment, and ensuring physical comforts by providing pain relief, psychosocial support and other elements of palliative care.
23. Retrieve, interpret and record information effectively in clinical data systems.

**(IV) Health and Society: the medical graduate as a health advocate**

24. Accept responsibility to protect and advance the health and well-being of individuals, communities and populations.
25. Explain factors that contribute to health, illness, disease and success of treatment of populations, including issues relating to health inequities and inequalities, diversity of cultural, spiritual and community values, and socio-economic and physical environment factors.
26. Communicate effectively in wider roles including health advocacy.
27. Explain and evaluate common population health screening and prevention approaches, including the use of technology for surveillance and monitoring of the

health status of populations, and provide instructions on patients' follow-up visits, medications and rehabilitative therapies, etc.

28. Understand the quality assurance system and safety management system of health care in hospitals, and be aware of their own competence, responsibility and limits in medical practice. Attach importance to patients' safety, and recognize relevant risk factors in time.

29. Understand the structures and functions of the national health care system in China, and the roles and relationships between health agencies and services, and understand the principles of rational allocation of resources, to meet the needs of individuals, populations and national health systems.

30. Understand the global health issues and the determinants of health and diseases.

**(V) Professionalism: the medical graduate as a professional**

31. Provide humanistic and quality health care services to all patients in accordance with the Ethic Principles of Chinese Physicians.

32. Demonstrate professional values in health practice, including empathy, respect for all patients and commitment to high quality clinical service standards, and personal qualities of honesty, integrity, teamwork and leadership.

33. Explain and apply the main principles of medical ethics in clinical practices. Communicate effectively with patients and their family members, colleagues and other health care professionals regarding ethical issues in medicine.

34. Be aware of the factors affecting physicians' health and wellbeing, such as fatigue, stress management and infection control, to mitigate health risks of professional practice, and identify the potential risks posed to patients by their own health.

35. Abide by the laws and regulations regarding clinical practice as well as professional ethics.

36. Recognize the limits of their own expertise, and show respect for other health care professionals, to learn and work effectively as a team.

37. Demonstrate awareness of self-directed learning and lifelong learning. Recognize the importance of continuous self-improvement and demonstrate a commitment to excellence.

#### IV. Program Length

1. Basic system: 5 years

2. Time allocation: 2.5 years for basic and clinical courses respectively

School Year Semester	First		Second		Third		Fourth		Fifth	
	1	2	3	4	5	6	7	8	9	10
Course Module	Public Basic Education		Basic Biomedical Sciences Education; Preventive Medicine Sciences Education			Clinical Sciences and Skills Education ( Including Graduation Internship )				
	Behavioral and Social Sciences Education ( Including Humanistic Quality Education during Graduation Internship )									
Comprehensive Quality	Early Patient Contact ( Clinical Supervisor ) ; Scientific Research Practice ( Double Supervisors ); Medical English; Innovation and Entrepreneurship Training ( Double Supervisors )									
	General Education		Basic Elective Education			Clinical Elective Education		Graduation Comprehensive Examination		

#### V. Main Disciplines and Main Courses

##### ( I ) Main Disciplines

Preclinical Medicine, Clinical Medicine

##### ( II ) Main Courses

1. Behavioural and Social Sciences, Medical Ethics and Natural Sciences Education:

Cultivation of Ideological Morality and Basis of Law, Outline of Chinese

Contemporary and Modern History, Mao Zedong Thought and Theory of Socialism

with Chinese Characteristics, Elementary Theory of Marxism, Current Situation and

Policies, Medical Advanced Mathematics, Medical Physics, Fundamental Chemistry,

Organic Chemistry, Fundamentals of Computer Culture, College English, Physical

Education, Medical Psychology, Medical Ethics, etc.

2. Basic Biomedical Sciences Education: Systematic Anatomy, Histology and

Embryology, Physiology, Biochemistry and Molecular Biology, Medical Genetics,

Medical Immunology, Medical Microbiology, Human Parasitology, Clinical Anatomy

by Regions, Pharmacology, Pathophysiology, Pathology, Basic Medical Case Study,

etc.

3. Preventive Medicine Sciences Education: Medical Statistics, Preventive Medicine (Including Epidemiology), Introduction to Global Health, etc.

4. Clinical Sciences and Skills Education: Physical Diagnostics, Experimental Diagnostics, Imaging Diagnosis, General Surgery and Animal Surgery, Internal Medicine, Surgery, Obstetrics and Gynecology, Pediatrics, Emergency Medicine, Neurology, Psychiatry, Lemology (Infectious Diseases), Rehabilitation Medicine, Nuclear Medicine, Traditional Chinese Medicine, Ophthalmology, Otorhinolaryngology and Head and Neck Surgery, Stomatology, Dermatovenereology, Clinic-based Case Study, Graduation Internship, etc.

## **VI. Curriculum Setting**

1. Required education: 222 credits, 93 courses (14 courses of Behavioral and Social Sciences Education, 11 courses of Public Basic Education, 30 courses of Basic Biomedical Sciences Education, 4 courses of Preventive Medicine Sciences Education, 32 courses of Clinical Sciences and Skills Education, 2 courses of Innovation Practice).

2. Elective education: 16 credits (6 credits of General Education, 5 credits of Basic Elective Education, 5 credits of Clinical Elective Education).

3. Distribution ratio of various courses

Behavioral and Social Sciences Education: 23 credits, 460 class hours, 9.7% of total credits;

Public Basic Education: 32 credits, 700 class hours, 13.4% of total credits;

Basic Biomedical Sciences Education: 59.5 credits, 1160 class hours, 25% of total credits;

Preventive Medicine Sciences Education: 8.5 credits, 144 class hours, 3.6% of total credits;

Clinical Sciences and Skills Education (Including Graduation Internship): 95 credits, 1316 class hours, 39.9% of total credits;

Innovation Practice: 4 credits, 1.7% of total credits;

Elective Education: 16 credits, 160 class hours, 6.7% of total credits.

## **VII. Basic Teaching Requirements and Teaching Methods**

### **( I ) Ideological and Political Education**

Ideological and political work will be integrated into the process of education and teaching. According to the training requirements of moral education and character cultivation, we should strengthen the ideological and political education of curriculum, and put the value molding, medical spirit and health concept into the knowledge teaching and ability training. We should strengthen the classroom teaching reform of "curriculum ideological and political education", change teaching ideas, improve teaching design, and construct typical cases of ideological and political teaching.

### **( II ) Behavioural and Social Sciences, Medical Ethics and Natural Sciences Education**

We should optimize the curriculum of general education, create excellent elective courses reflecting the school characteristics, so that students have good social and humanistic quality and improve their comprehensive quality. We should pay attention to the cultivation of communication ability, emphasize interpersonal communication ability in the basic stage, and focus on doctor-patient communication practice in clinical stage. We should strengthen the teaching of medical related mathematics, physics, chemistry, computer and informatics, so that students have a solid foundation of natural science to meet the needs of the development of modern medicine and smart medical technology

### **(III) Professional Education**

#### **1. Strengthen English Teaching**

We should educate students according to their natural abilities in the form of graded teaching of college English, basic professional English and clinical professional English. It is required to pass CET-4.

#### **2. Reform the Teaching Method, Embody the Student-centered Education and Teaching Idea**

Main courses of basic medicine and clinical medicine are taught in small classes with 30-35 students. We pay attention to the combination of theoretical teaching and

experimental teaching. On the basis of improving the teaching quality of classroom teaching and bedside teaching, the group discussion teaching mode with the main characteristics of "teachers' arrangement and guidance, students' autonomous discussion and learning, students' analysis and demonstration report and teacher's comments" is advocated. Courses such as "Basic Medical Case Study", "Clinic-based Case Study" and "Clinical Diagnostic Thinking Training" are set up to guide and stimulate students' active learning consciousness, cultivate students' ability of self-study, analysis and judgment, and strengthen the cultivation of comprehensive quality.

### **3. Strengthening the Characteristics of "Double Supervisors" throughout the Whole Process of Training**

It mainly includes three aspects: the basic and clinical supervisors jointly guide to complete the basic and clinical stage of "Scientific Research Practice"; the basic supervisors guide the completion of innovation and entrepreneurship training projects; the clinical supervisors guide the completion of "Early Patient Contact". The principle of scientific method and medical research method education is throughout the whole process of personnel training.

### **4. Pay Attention to Strengthen Experimental Teaching and Clinical Practice Teaching**

In the experimental teaching, on the premise of ensuring the basic confirmatory experiments, we carry out "Comprehensive Morphological Experiments" and "Comprehensive Functional Experiments", and provide students with the opportunity of open experiment through the double supervisor platform. We cultivate and improve students' practical abilities and problem analysis and solving abilities. In the clinical practice teaching, we should fully guarantee the clerkship and internship, carry out "Early Public Health Practice", "Early Patient Contact", "Fundamental Clinical Skill Training" and "Comprehensive Clinical Skill Training". Before the internship, we carry out the level test. During the internship, we carry out the departmental rotation examinations. After the internship, we carry out the graduation comprehensive examination. We strengthen the practice and improve the ability of clinical work

through practice.

## VIII. Graduation and Degree Award

### ( I ) Course Examination

All courses are assessed in two forms: examination and check. We actively advocate the combination of formative assessments and summative assessments. The evaluation methods cover classroom discussion, daily homework, stage test, experiment design and operation, experimental report, computer practice, internship, skill examination and other learning processes. Based on the teaching outline, the students' ability of analysis, synthesis and problem-solving is tested.

### ( II ) Graduation Comprehensive Examination

Graduation Comprehensive Examination is conducted before graduation, including Comprehensive Written Examination, Comprehensive Clinical Skill Examination and Comprehensive Graduation Report. The students' understanding and application ability of professional knowledge, clinical skill operation level, clinical thinking, scientific research thinking, problem analysis and problem-solving ability are investigated.

Item		Subject	Method
Comprehensive Written Examination		internal medicine, surgery, obstetrics and gynecology, pediatrics	written
Comprehensive Clinical Skill Examination	OSCE	13 stations	written, models, SP
	Computer-based Case Simulations	internal medicine, surgery, obstetrics and gynecology, pediatrics	online
Comprehensive Graduation Report		basic research report	graduation report and reply
		clinical case report	

### ( III ) Graduation and Degree Award

Students should complete 238 credits of course learning and passed all the examinations, including 222 credits for compulsory courses and 16 credits for elective courses. Students should pass the Clinical Medicine (Undergraduate) Level Test and



Graduation Comprehensive Examination. Those who meet the relevant management regulations for graduation are allowed to graduate, and the undergraduate diploma in medicine is issued. Those who meet the requirements of degree conferment will be awarded bachelor's degree of medicine.

## **IX. Table of Teaching Schedule**

临床医学（五年制）专业教学进程表

Table of Teaching Schedule for Clinical Medicine (Five-year Schooling) Major

课程类别 Course Type	课程编码 Course Code	课程名称 Course Name	学 分 Credits	学时分配 Credit Hour Distribution								各学期周学时分配 Weekly Hours Per Semester										课程性质 Course Nature	设置学期 Semester		开课学院 School	备 注 Notes	
				合计 Total	大课理论 Lecture	小课理论 Tutorial	小组研讨 Group Research	实验/实践 Exp/Prac	见习 Clerkship	见实习 Clerkship and Internship	实习 Internship	一	二	三	四	五	六	七	八	九	十		考 试 Exam	考 查 Check			
												1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th						
人文社会科学 课程 Behavioral and Social Sciences Education		思想道德修养与法律基础    Cultivation of Ideological Morality and Basis of Law	3.0	48	48							3											必修 Required	1		26	
		中国近现代史纲要    Outline of Chinese Contemporary and Modern History	3.0	48	48								3										必修 Required		3	26	
		马克思主义基本原理    Elementary Theory of Marxism	3.0	48	48							3											必修 Required	2		26	
		毛泽东思想和中国特色社会 主义理论体系概论    Mao Zedong Thought and Theory of Socialism with Chinese Characteristics	3.0	48	48									3									必修 Required	4		26	
		思想政治理论综合实践    Comprehensive Practice of Ideological and Political Theory	2.0	64					64						2	2							必修 Required		4-5	26	
		形势与政策  Current Situation and Policies	2.0	64	16				48				1	1	1	1	1	1	1	1	1		必修 Required		1-8	26	第1-2学期讲课，其他学 期采用备案制 (Semester 1-2 using lectures, semester 3-8 using the filling system)
		新生研讨课  Freshman Seminar	1.0	16	16								2										必修 Required		1	28	
		医学生职业规划  Career Planning for Medical Students	0.5	16	16									2				2					必修 Required		2、6	27	
		心理健康  Mental Health	0.5	16	16									2									必修 Required		2	15	
		医学伦理学  Medical Ethics	1.0	16	16														2				必修 Required		8	28	
		医学心理学  Medical Psychology	1.0	16	16										2								必修 Required		5	28	1-8周 (Week 1-8)
		人际关系与沟通技巧    Interpersonal Relationship and Communication Skills	0.5	12	4		8							2									必修 Required		2	28	
		医患沟通  Doctor-Patient Communication	1.5	32		16		16								2	2	4					必修 Required		6-8	28	
		卫生法学  Medical Jurisprudence	1.0	16	16									2									必修 Required		3	11	单周 (Single-week)
		大学英语  College English	8.0	192	192							3	3	3	3							必修 Required	1-4		12		
		计算机文化基础    Fundamentals of Computer Culture	1.0	48	16			32				3											必修 Required		1	32	SPOC在线学习 (SPOC online)
		军事理论  Military Theory	2.0	36	32			4				2											必修 Required		1	26	
		军事技能  Military Skill Training	2.0	3周(Three weeks)				3周(Three weeks)						3周(Three weeks)									必修 Required		2	20	短学期1 (Short semester 1)

课程类别 Course Type	课程编码 Course Code	课程名称 Course Name	学 分 Credits	学时分配 Credit Hour Distribution								各学期周学时分配 Weekly Hours Per Semester										课程性质 Course Nature	设置学期 Semester		开课学院 School	备 注 Notes	
				合计 Total	大课理论 Lecture	小课理论 Tutorial	小组研讨 Group Research	实验/实践 Exp/Prac	见习 Clerkship	见实习 Clerkship and Internship	实习 Internship	一 1st	二 2nd	三 3rd	四 4th	五 5th	六 6th	七 7th	八 8th	九 9th	十 10th		考 试 Exam	考 查 Check			
公共基础课程 Public Basic Education		体育  Physical Education	4.0	144	16			128															必修 Required		1-4	14	实践中含课外体测理论 考试16学时 (In practice,16 credit hours of extracurricular physical theory examination are included.)
		医学高等数学  Medical Advanced Mathematics	3.0	48	48																		必修 Required		1	13	
		医用物理学  Medical Physics	3.5	64	48			16															必修 Required		1	13	
		基础化学  Fundamental Chemistry	2.5	40	40																		必修 Required		1	5	
		基础化学实验   Fundamental Chemistry Experiments	1.0	32				32															必修 Required		1	5	
		有机化学II   Organic Chemistry II	4.0	64	64																		必修 Required	2		5	
	有机化学实验II   Organic Chemistry Experiments II	1.0	32				32															必修 Required		2	5		
		医学细胞生物学  Medical Cell Biology	2.0	32		32																	必修 Required		1	28	
		分子医学实验 I   Molecular Medicine Experiments I	0.5	12			4	8															必修 Required		1	28	10-15周 (Week 10-15)
		系统解剖学  Systematic Anatomy	3.0	48		48																	必修 Required	1-2		28	
		形态学实验 I   Morphological Experiments I	2.0	64			16	48															必修 Required	1-2		28	
		组织学与胚胎学   Histology and Embryology	2.5	44		32	12																必修 Required	2		28	
		形态学实验 II   Morphological Experiments II	1.0	24				24															必修 Required		2	28	1-4、6-7、9-11、13-15 周 (Week 1-4、6-7、9-11 、13-15)
		医学遗传学 (英文)   Medical Genetics (English)	1.5	24		24								2									必修 Required	3		28	1-12周 (Week 1-12)
		分子医学实验 II   Molecular Medicine Experiments II	0.5	16				16						4									必修 Required		3	28	1-3、12周 (Week 1-3、12)
		生物化学与分子生物学   Biochemistry and Molecular Biology	4.5	72		52	20							6									必修 Required	3		28	1-12周 (Week 1-12)
		分子医学实验 III  Molecular Medicine Experiments III	1.5	48				48						4									必修 Required	3		28	1-12周 (Week 1-12)
		生理学  Physiology	4.0	64		64								4									必修 Required	3		28	
		机能学实验I   Functional Experiments I	1.0	32				32						4									必修 Required		3	28	双周 (Double-week)
		医学免疫学  Medical Immunology	2.5	40		36	4									4							必修 Required	4		28	1-10周 (Week 1-10)
		免疫与病原生物学实验I   Immunology and Pathogen Biology Experiments I	0.5	16				16								4							必修 Required		4	28	6-9周 (Week 6-9)

课程类别 Course Type	课程编码 Course Code	课程名称 Course Name	学 分 Credits	学时分配 Credit Hour Distribution								各学期周学时分配 Weekly Hours Per Semester										课程性质 Course Nature	设置学期 Semester		开课学院 School	备 注 Notes
				合计 Total	大课理论 Lecture	小课理论 Tutorial	小组研讨 Group Research	实验/实践 Exp/Prac	见习 Clerkship	见实习 Clerkship and Internship	实习 Internship	一	二	三	四	五	六	七	八	九	十		考 试 Exam	考 查 Check		
												1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th					
生物医学课程 Basic Biomedical Sciences Education		医学微生物学  Medical Microbiology	2.0	32		32									4							必修 Required	4		28	1-8周 (Week 1-8)
		免疫与病原生物学实验II   Immunology and Pathogen Biology Experiments II	1.0	32			4	28						3								必修 Required		4	28	3-13周 (Week 3-13)
		人体寄生虫学  Human Parasitology	1.5	24		24								2								必修 Required	4		28	
		免疫与病原生物学实验III   Immunology and Pathogen Biology Experiments III	0.5	16				16						2								必修 Required		4	28	依据理论课进度安排 (According to the schedule of theory course)
		局部临床解剖学   Clinical Anatomy by Regions	3.5	88		16	8	64						6								必修 Required	4		28	
		病理学  Pathology	4.0	64		64									4							必修 Required	5		28	
		形态学实验III   Morphological Experiments III	1.0	32				32							2							必修 Required	5		28	
		药理学  Pharmacology	3.5	56		40	16								4							必修 Required	5		28	
		机能学实验II   Functional Experiments II	0.5	16				16							3							必修 Required		5	28	依据理论课进度安排 (According to the schedule of theory course)
		病理生理学   Pathophysiology	3.5	56		40	16								4							必修 Required	5		28	
		机能学实验III   Functional Experiments III	0.5	16				16							3							必修 Required	5		28	依据理论课进度安排 (According to the schedule of theory course)
		基础医学英语  Elementary Medical English	1.0	32				32						2								必修 Required		3	28	
		基础医学整合案例研讨   Basic Medical Case Study	4.0	64			64							2	2							必修 Required		4-5	28	
		形态学综合实验   Comprehensive Morphological Experiments	1.0	32				32						4								必修 Required		4	28	9-16周 (Week 9-16)
		机能学综合实验   Comprehensive Functional Experiments	2.0	64				64							8							必修 Required		5	28	9-16周 (Week 9-16)
	科研方法与实践（双导师）   Scientific Research Practice (Double Supervisors)	3.0	6周(Six weeks)				6周(Six weeks)						1周 (One week)	1周 (One week)	1周 (One week)	1周 (One week)	1周 (One week)	1周 (One week)				必修 Required		2-7	28	短学期或分散进行 (Short semester or seperately)
预防医学课程 Preventive Medicine Sciences Education		医学统计学  Medical Statistics	2.5	56		24		32							4						必修 Required	5		28		
		预防医学（含流行病学）   Preventive Medicine (Including Epidemiology)	4.0	72		56		16								5						必修 Required	6		28	
		全球卫生与健康概论   Introduction to Global Health	1.0	16		16										2						必修 Required		6	28	1-8周 (Week 1-8)
		早期公共卫生实践  Early Public Health Practice	1.0	2周(Two weeks)				2周(Two weeks)						1周 (One week)		1周 (One week)							必修 Required		2、4	28

课程类别 Course Type	课程编码 Course Code	课程名称 Course Name	学 分 Credits	学时分配 Credit Hour Distribution								各学期周学时分配 Weekly Hours Per Semester										课程性质 Course Nature	设置学期 Semester		开课学院 School	备 注 Notes	
				合计 Total	大课理论 Lecture	小课理论 Tutorial	小组研讨 Group Research	实验/实践 Exp/Prac	见习 Clerkship	见实习 Clerkship and Internship	实习 Internship	一 1st	二 2nd	三 3rd	四 4th	五 5th	六 6th	七 7th	八 8th	九 9th	十 10th		考 试 Exam	考 查 Check			
临床医学课程 (含毕业实 习) Clinical Sciences and Skills Education (Including Graduation Internship)		体检诊断学 Physical Diagnostics	4.5	96		48				48												必修 Required	6		28	桥梁课教学15周 (15 weeks of Bridge Course)	
		实验诊断学 Experimental Diagnostics	1.5	32		16				16													必修 Required	6		28	桥梁课教学15周 (15 weeks of Bridge Course)
		影像诊断学 Imaging Diagnosis	2.5	48		32				16													必修 Required	6		28	桥梁课教学15周 (15 weeks of Bridge Course)
		外科学总论与动物手术学 General Surgery and Animal Surgery	3.0	64		32				32													必修 Required	6		28	桥梁课教学15周 (15 weeks of Bridge Course)
		核医学 Nuclear Medicine	1.5	24		16				8													必修 Required		6	28	桥梁课教学15周 (15 weeks of Bridge Course)
		内科学 Internal Medicine	8.5	180		72	20			88													必修 Required	6-7		28	系统课教学36周 (36 weeks of System Course)
		外科学 Surgery	7.5	160		64	16			80													必修 Required	6-7		28	系统课教学36周 (36 weeks of System Course)
		妇产科学 Obstetrics and Gynecology	4.0	88		40	6			42													必修 Required	6-7		28	系统课教学36周 (36 weeks of System Course)
		儿科学 Pediatrics	4.5	96		48	16			32													必修 Required	6-7		28	系统课教学36周 (36 weeks of System Course)
		急诊医学 Emergency Medicine	2.5	56		24				32													必修 Required	6		28	系统课教学36周 (36 weeks of System Course)
		传染病学 Lemology (Infectious Diseases)	2.5	44		32					12												必修 Required	8		28	中小科课程教学1-5周 (1-5 weeks of Primary and Secondary Course)
		中医学 Traditional Chinese Medicine	2.0	36		32					4												必修 Required	8		28	中小科课程教学1-5周 (1-5 weeks of Primary and Secondary Course)
		眼科学 Ophthalmology	1.5	32		16					16												必修 Required	8		28	中小科课程教学6-10周 (6-10 weeks of Primary and Secondary Course)
		耳鼻咽喉与头颈外科学 Otorhinolaryngology and Head and Neck Surgery	2.0	40		24					16												必修 Required	8		28	中小科课程教学6-10周 (6-10 weeks of Primary and Secondary Course)
		口腔科学 Stomatology	1.5	32		16					16												必修 Required	8		28	中小科课程教学6-10周 (6-10 weeks of Primary and Secondary Course)
		皮肤性病学 Dermatovenerology	1.5	24		16					8												必修 Required	8		28	中小科课程教学6-10周 (6-10 weeks of Primary and Secondary Course)
		神经病学 Neurology	2.5	36		28					8												必修 Required	8		28	中小科课程教学11-15周 (11-15 weeks of Primary and Secondary Course)
		精神病学 Psychiatry	2.0	40		24					16												必修 Required	8		28	中小科课程教学11-15周 (11-15 weeks of Primary and Secondary Course)
	康复医学 Rehabilitation Medicine	1.5	28		24					4												必修 Required		8	28	中小科课程教学11-15周 (11-15 weeks of Primary and Secondary Course)	

课程类别 Course Type	课程编码 Course Code	课程名称 Course Name	学 分 Credits	学时分配 Credit Hour Distribution								各学期周学时分配 Weekly Hours Per Semester										课程性质 Course Nature	设置学期 Semester		开课学院 School	备 注 Notes
				合计 Total	大课理论 Lecture	小课理论 Tutorial	小组研讨 Group Research	实验/实践 Exp/Prac	见习 Clerkship	见实习 Clerkship and Internship	实习 Internship	一 1st	二 2nd	三 3rd	四 4th	五 5th	六 6th	七 7th	八 8th	九 9th	十 10th		考 试 Exam	考 查 Check		
		全科医学 Family Medicine	1.5	24		24												3			必修 Required	8		28		
		循证医学 Evidence-based Medicine	1.5	24		24												2			必修 Required	7		28		
		临床医学英语 Clinical Medical English	1.0	32				32													必修 Required		6	28		
		临床诊断思维训练  Clinical Diagnostic Thinking Training	1.0	16			16														必修 Required		6	28	桥梁课教学8-15周 (8-15 weeks of Bridge Course)	
		临床医学综合病例研讨  Clinic-based Case Study	4.0	64			64											2	2		必修 Required		6-7	28		
		早期接触临床（临床导师）  Early Patient Contact (Clinical Supervisor)	1.0	2周(Two weeks)				2周(Two weeks)						1周 (One week)		1周 (One week)					必修 Required		2、4	28	短学期1、2 (Short semester 1 and 2)	
		临床基本技能训练  Fundamental Clinical Skill Training	1.5	3周(Three weeks)				3周(Three weeks)										3周 (Three weeks)			必修 Required		6	28	短学期3 (Short semester 3)	
		临床综合技能训练  Comprehensive Clinical Skill Training	1.5	3周(Three weeks)				3周(Three weeks)											3周 (Three weeks)		必修 Required		8	28	实习前集中进行 (Before internship)	
		内科实习 Internal Medicine Internship	8.0	16周 (Sixteen weeks)							16周 (Sixteen weeks)										必修 Required		9-10	28		
		外科实习（含麻醉）  Surgery Internship (Including Anesthesiology Internship)	8.0	16周 (Sixteen weeks)							16周 (Sixteen weeks)										必修 Required		9-10	28		
		妇产科实习 Gynecology and Obstetrics Internship	4.0	8周(Eight weeks)							8周(Eight weeks)									8周(Eight weeks)	必修 Required		9-10	28		
		儿科实习  Paediatrics Internship	4.0	8周(Eight weeks)							8周(Eight weeks)									8周(Eight weeks)	必修 Required		9-10	28		
		社区实习 Community Medicine Internship	1.0	2周 (Two weeks)							2周 (Two weeks)									2周 (Two weeks)	必修 Required		9-10	28		
创新实践环节 Innovation Practice		第二课堂 Co-curricular Activities	2.0	按《江南大学本科第二课堂成绩单实施办法》执行																	必修 Required			30	课外进行 (Extracurricular)	
		创新创业训练（双导师）  Innovation and Entrepreneurship Training (Double Supervisors)	2.0	按《江南大学本科创新创业训练学分认定办法》执行																	必修 Required			22	课外进行 (Extracurricular)	
合计 Total			222.0	3780	764	1268	310	944	394	100	50周	36	28	30	35	30	32	23	30	0	0					

临床医学（五年制）专业教学进程表（选修课）

Table of Teaching Schedule for Clinical Medicine (Five-year Schooling) Major (Elective Courses)

课程类别 Course Type	课程编码 Course Code	课程名称 Course Name	学 分 Credits	学时分配 Credit Hour Distribution								各学期周学时分配 Weekly Hours Per Semester										课程性质 Course Nature	设置学期 Semester		开课学院 School	备 注 Notes	
				合计 Total	大课理论 Lecture	小课理论 Tutorial	小组研讨 Group Research	实验/实践 Exp/Prac	见习 Clerkship	见实习 Clerkship and Internship	实习 Internship	一 1st	二 2nd	三 3rd	四 4th	五 5th	六 6th	七 7th	八 8th	九 9th	十 10th		考 试 Exam	考 查 Check			
				分为创新创业类、国学文化类、科学精神类、法律思维类、心理健康类、艺术审美类、非技术能力课程类7个模块 每个模块最多选修2.0学分（创新创业类必选2.0学分），每学期最多选修2门课程，共修满6.0学分。 课程举例：营养与免疫健康，食品与人体健康，茶的健康功效与茶文化，等。 Including 7 modules: Innovation and Entrepreneurship, Traditional Chinese Culture, Scientific Spirit, Legal and Critical Thinking, Mental Health, Arts and Aesthetic, and Non-technical Competence. Up to 2.0 credits per module (2.0 credits required for Innovation and Entrepreneurship) and up to 2 courses per semester with a total of 6.0 credits. Course examples: Nutrition and Immune Health, Food and Human Health, Health Effect and Culture of Tea, etc.																							
通识教育选修课 General Education (Compulsory)			6.0																								
基础类选修课 Basic Elective Education		Python语言程序设计  Python Programming	3.0	64	32			32					4										选修 Elective		2	32	选修5学分 (5.0 credits required)
		健康与设计  Health and Design	2.0	32	32								2										选修 Elective		3	6	
		医学美术应用  Human Body Aesthetics and Structure Painting	2.0	32	32								2										选修 Elective		2	28	
		医学信息检索  Medical Information Retrieval	1.0	16	16								2										选修 Elective		2	21	
		医用高分子材料  Biomedical Materials	1.0	16	16								2										选修 Elective		3	28	
		体育健康学  Physical Health	1.0	16	16									2									选修 Elective		4	28	
		医学导论  Introduction to Medicine	1.0	16	16								2										选修 Elective		2	28	
		卫生经济学  Medical Economics	1.0	16	16										2								选修 Elective		4	28	
		影像解剖学与读片  Image Anatomy and Film Reading	1.5	32	16			16								2							选修 Elective		4	28	
		神经科学  Neural Science	2.0	32	32											2							选修 Elective		4	28	
		生物信息学  Bioinformatics	1.0	24	8			16								2							选修 Elective		4	28	
		社会医学  Social Medicine	1.5	24	24												3						选修 Elective		5	28	
	法医学  Forensic Medicine	2.0	32	32												2						选修 Elective		5	28		
	医学科研论文写作及技巧   Medical Research Paper Writing and Skills	1.0	16	16									2									选修 Elective		3	28		
	社区医学  Community Medicine	1.0	16	16												2						选修 Elective		5	28		
	护理学概论  Introduction to Nursing	1.5	24	24													3					选修 Elective		6	28		
	儿童保健学  Child Health Care	1.0	16	16														2				选修 Elective		7	28		
	老年医学  Gerontology	1.5	24	24															3			选修 Elective		8	28		
	临床流行病学  Clinical Epidemiology	1.0	16	16															2			选修 Elective		7	28		















