

课程详述

COURSE SPECIFICATION

以下课程信息可能根据实际授课需要或在课程检讨之后产生变动。如对课程有任何疑问，请联系授课教师。

The course information as follows may be subject to change, either during the session because of unforeseen circumstances, or following review of the course at the end of the session. Queries about the course should be directed to the course instructor.

1.	课程名称 Course Title	病理学, Pathology
2.	授课院系 Originating Department	医学院, School of Medicine
3.	课程编号 Course Code	MED307
4.	课程学分 Credit Value	3
5.	课程类别 Course Type	专业核心课 Major Core Courses
6.	授课学期 Semester	春季 Spring
7.	授课语言 Teaching Language	英文 English
8.	授课教师、所属学系、联系方式 (如属团队授课, 请列明其他授课教师) Instructor(s), Affiliation & Contact (For team teaching, please list all instructors)	张文勇教授 南方科技大学医学院 广东省深圳市学苑大道 1088 号 B 栋 504 Tel(电话): 0755-88018026 Email: zhangwy@sustc.edu.cn Prof. ZHANG Wenyong Professor, School of Medicine South University of Science and Technology of China
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	无 NA
10.	选课人数限额(可不填) Maximum Enrolment (Optional)	

11. 授课方式 Delivery Method	讲授 Lectures	习题/辅导/讨论 Tutorials	实验/实习 Lab/Practical	其它(请具体注明) Other (Please specify)	总学时 Total
学时数 Credit Hours	32	0	0	16 (案例教学/小组讨论 Case Study/TBL)	48
12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	MED306组织学与胚胎学 MED306 Histology & Embryology				
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	无 None				
14. 其它要求修读本课程的学系 Cross-listing Dept.	无 None				

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

病理学是研究疾病的病因、发病机制、病理变化、结局和转归的医学基础学科，在医学科学研究中占有重要的地位。通过对病理学的学习，能够阐述和应用病理学的基本理论和基本知识，能说出疾病的发生发展演进规律，学会在细胞、组织、器官、系统水平和整体水平解释疾病的病理变化规律，为医学科研打下坚实的基础。

Pathology is a basic medical discipline which studies disease etiology, pathogenesis, pathological changes and outcomes. It plays an important role in medical research. Through the study of pathology, we can expect our students can apply the basic theory and knowledge to describe the occurrence, development and evolution of diseases. They can also learn to elaborate the pathological changes of diseases in the knowledge of cell, tissue, organ, system and the overall level. Thus, this course laid a solid foundation for student's future basic medical research.

16. 预达学习成果 Learning Outcomes

通过本课程采用理论授课、实验教学与案例教学、小组讨论等多元化教学方法相结合，预期达到以下学习效果：Through the combination of theoretical teaching, experimental teaching, case studying, group discussion and other diversified teaching methods, the following learning effects are expected to be achieved:

1. 基础理论和基本知识：掌握各个器官系统疾病的基本病理变化。Basic theory and basic knowledge. Grasp the basic pathological changes of various organ system diseases
2. 基本技能：能够解释各种常见疾病的病理变化与结局；熟悉各种基本病变的病理大体标本及病理切片标本的观察；熟悉病理学常用科研方法。Basic Skills: Student can explain the pathological changes and outcomes of various common diseases. Familiar with the observation of pathological specimens and pathological sections of various basic diseases. Familiar with the common scientific research methods of pathology.
3. 综合素质：充分发挥学生的主观能动性、提升学生的自主学习能力和独立思考能力，为今后的基础医学研究奠定基础。Comprehensive quality: encourage students' subjective initiative. Improving students' ability of independent learning and independent thinking. This course laid the foundation for student' future basic medical research.

17. 课程内容及教学日历（如授课语言以英文为主，则课程内容介绍可以用英文；如团队教学或模块教学，教学日历须注明主讲人）
Course Contents (in Parts/Chapters/Sections/Weeks. Please notify name of instructor for course section(s), if this is a team teaching or module course.)

第一章 绪论及病理研究常用技术

熟悉病因学、发病机制、形态学变化的概念。

了解病理学的研究内容和研究方法、病理学新技术的应用。

Chapter 1 Introduction and Pathology Research Techniques

Familiar with the ethology, pathogenesis and morphological changes of disease.

Understand the research contents and research methods of pathology and the application of new pathology techniques.

第二章 组织的适应、损伤与修复

细胞损伤的原因。肥大、增生、萎缩、变性和坏死的概念、类型、病理变化。坏死的结局影响。

再生的概念和各种组织的再生能力，肉芽组织的概念和形态特征。

Chapter 2 Tissue adaptation, injury and Repair

The causes of cell injury. The concept, type and pathological changes of hypertrophy, hyperplasia, atrophy, degeneration and necrosis. The consequences of necrosis.

The concept of regeneration and the regeneration ability of various tissues. The concept and morphological characteristics of granulation tissue.

第三章 局部血液循环障碍

淤血的概念，肝淤血、肺淤血的病理变化。血栓形成、栓塞、梗死和水肿的概念和对机体的影响。血栓形成的条件及后果。梗死的病理变化。

Chapter 3 Blood Circulation Disturbance

The concept of congestion. Pathological changes of liver congestion and pulmonary congestion. The concept of thrombosis, embolism, infarction and edema and its influence on the body. Conditions and consequences of thrombosis. Pathological changes of infarction.

第四章 炎症

炎症的基本病理变化。渗出的发生机理。炎症的类型、病理特征和结局。肉芽肿性炎概念及类型。

Chapter 4 Inflammation

The basic pathological changes of inflammation. The mechanism of exudation. Types, pathological features and outcomes of inflammation. The concept and types of granulomatous inflammation.

第五章 免疫性疾病

自身免疫性疾病发病机制和类型，免疫缺陷，器官和骨髓移植排反应。

Chapter 5 Immune Disease

The pathogenesis and types of autoimmune diseases, immune deficiency, organ and bone marrow transplantation host versus graft reaction(GVHD).

第六章 肿瘤

肿瘤的概念。肿瘤的一般形态与结构，肿瘤的分化与异型性。肿瘤的生长及扩散。良性肿瘤与恶性肿瘤的区别。癌与

肉瘤的区别。肿瘤的命名和分类原则。常见上皮性肿瘤和间叶性肿瘤的一般特点。癌前病变的概念。肿瘤发生发展的基本理论。

Chapter 6 Cancer

The concept of cancer. The general morphology and structure of the tumor. The differentiation and architectural atypia of the tumor. The invasion and metastasis of tumors. The difference between benign tumor and malignant tumor. The difference between cancer and sarcoma. The nomenclature and classification principles of tumors. Common features of epithelial tumors and mesenchymal tumors. The concept of precancerous lesions. The basic theory of tumor occurrence and development.

第七章 心血管系统疾病

动脉粥样硬化症的基本病变。冠心病的类型、病变及后果。高血压病的基本病变、各器官病变及后果。风湿病的基本病理改变，风湿性心脏病的病变。慢性心瓣膜病的病理基础以及对血液动力学的影响。

Chapter 7 Cardiovascular System

The pathological process of atherosclerosis. Types, lesions and consequences of coronary heart disease. The basic pathological changes of hypertension and the consequences of various organ diseases. The basic pathological changes of rheumatism and the pathological changes of rheumatic heart disease. The pathological basis of chronic valvular vitium of heart disease and its effect on hemodynamics.

第八章 呼吸系统疾病

熟悉慢性支气管炎、肺气肿、肺心病的病变及发病机理。掌握大叶性肺炎、小叶性肺炎、病毒性肺炎和支原体性肺炎的病因发病、病变特点及临床病理联系。掌握肺硅沉着症的病变特点。掌握肺癌、鼻咽癌的病理特点及转移途径。

Chapter 8 Respiratory System

Familiar with the pathogenesis of chronic bronchitis, pulmonary emphysema, chronic cor pulmonale disease. Master the etiology, pathogenesis, pathological characteristics and clinic pathological relationship of lobar pneumonia, lobular pneumonia, viral pneumonia and mycoplasma pneumonia. Grasp the characteristics of pneumoconiosis. Master the pathological characteristics and metastasis pathways of lung cancer and nasopharyngeal carcinoma.

第九章 消化系统疾病

慢性萎缩性胃炎的病因。消化性溃疡病的病理特点、结局及合并症。病毒性肝炎和肝硬变的病因、发病机制、基本病变、临床病理联系。消化道癌及肝癌的肉眼及组织学类型。

Chapter 9 Digestive System

The etiology of chronic atrophic gastritis. The pathological features, outcomes and complications of peptic ulcer disease. Etiology, pathogenesis, basic pathological changes and clinic pathological correlation of viral hepatitis and cirrhosis. Histological types of gastrointestinal cancer and liver cancer.

第十章 淋巴造血系统

淋巴结反应性增生的病理改变及与肿瘤性病变的鉴别。了解白血病的常见分型及临床病理特点，熟悉急性、慢性白血病的病变特点及临床表现。

Chapter 10 Lymphoid Hematopoietic System

Pathological differentiation of reactive hyperplasia of lymph nodes and their neoplastic lesions. Understand the common types and clinic pathological characteristics of leukemia. Familiar with the pathological characteristics and clinical manifestations of acute and chronic leukemia.

第十一章 泌尿系统

肾小球肾炎的病因发病机制和病理分型。肾盂肾炎的病因发病机制和病理类型。尿毒症的病因发病机制和病理特点。

Chapter 11 Urinary System

Etiology, pathogenesis and pathological classification of glomerulonephritis. Etiology, pathogenesis and pathological types of pyelonephritis. Etiology, pathogenesis and pathological features of uremia.

第十二章 生殖系统

子宫颈癌、子宫体癌的基本病变特征；滋养层细胞疾病的分类和病理特征；卵巢肿瘤的分类和病理特征；乳腺癌的基本病变特征。前列腺炎和前列腺癌的概念。

Chapter 12 Reproductive System

Basic pathological characteristics of cervical cancer and endometrial adenocarcinoma. Classification and pathological features of gestational trophoblastic diseases (GTD). Classification and pathological features of ovarian tumors. The basic pathological features of breast cancer. The concept of prostate cancer and prostatitis. The concept of prostatitis and prostate cancer.

第十三章 内分泌系统

非毒性与毒性甲状腺肿的病因和发病、病变发展过程及形态特点。甲状腺肿与甲状腺瘤的区别，甲状腺癌的分型。肾上腺疾病和胰岛疾病。

Chapter 13 Endocrinology System

The etiology and pathogenesis, disease development process and morphological characteristics of nontoxic goiter and toxic goiter.

The difference between thyroiditis and thyroid tumor, the classification of thyroid cancer. Adrenal diseases and islet diseases.

第十四章 神经系统

中枢神经系统常见合并症的病变特点，化脓性脑膜炎、病毒性脑炎的病变特点，脊髓灰质炎及乙脑的流行病学特征及各自的病变特征。中枢神经肿瘤和周围神经肿瘤。Alzheimer 病和 Parkinson 病。

Chapter 14 Neurology System

The characteristics of common complications of central nervous system. The characteristics of purulent meningitis and viral encephalitis. Epidemiological characteristics and pathological characteristics of poliomyelitis and encephalitis B. Central nervous system tumor and peripheral nerve tumor. Alzheimer's disease and Parkinson's disease.

第十五章 环境和营养病理学

职业及环境暴露性污染。成瘾性疾病如吸烟、酒精中毒、治疗性药物损伤、药物滥用。营养性疾病如肥胖症、营养不良等。

Chapter 15 Environmental and Nutritional Pathology

Occupational and environmental exposure pollution. Addictive diseases such as smoking, alcoholism, therapeutic drug injury and drug abuse. Nutritional diseases such as obesity and malnutrition.

第十六章 寄生虫病及传染病

阿米巴病、血吸虫病、丝虫病。结核病的基本病变及转化规律、病变特点；伤寒的病理变化及各期病变特点；各型细

菌性痢疾的病理变化。

Chapter 16 Parasitosis and Infection Diseases

Amoebiasis, blood fluke and filariasis. The basic pathological changes, transformation regularity and pathological characteristics of tuberculosis. Pathological changes of typhoid fever and the pathological changes of different stages. Pathological changes of various types of bacillary dysentery.

专题序号 Topic No.	教学内容 Teaching Contents	章节 Chapters	学时 Hours	教学方法 Teaching Method	
				理论授课 Lecture	案例教学/小组讨论 Case Study/TBL
1	诸论及病理研究常用技术 Introduction and Pathology Research Techniques	Ch18.1~18.12		3hr	
2	损伤与修复 Injury and Repair	Ch1.1~1.5 Ch2.1~2.3		2 hr	1 hr
3	血循障碍 Blood Circulation Disturbance	Ch3.1~3.6		2 hr	1 hr
4	免疫与炎症 Immune and Inflammation	Ch11.1~11.3 Ch4.1~4.3		2 hr	1 hr
5	肿瘤 (1) Cancer-I	Ch5.1~ Ch5.5		2 hr	1 hr
6	肿瘤 (2) Cancer-II	Ch5.6~5.14		2 hr	1 hr
7	心血管系统 Cardiovascular System	Ch7.1~7.11		2 hr	1 hr
8	呼吸系统 Respiratory System	Ch8.1~8.7		2 hr	1 hr
9	消化系统 Digestive System	Ch9.1~9.12		2 hr	1 hr
10	淋巴造血系统 Lymphoid Hematopoietic System	Ch10.1~10.4		2 hr	1 hr
11	泌尿系统 Urinary System	Ch12.1~12.3		2 hr	1 hr
12	生殖系统 Reproductive System	Ch13.1~13.7		2 hr	1 hr
13	内分泌系统 Endocrinology System	Ch14.1~14.5		2 hr	1 hr
14	神经系统 Neurology System	Ch15.1~15.7		2 hr	1 hr
15	环境和营养病理学 Environmental and Nutritional Pathology	Ch6.1~6.3		2 hr	1 hr
16	寄生虫病及传染病	Ch17.1~17.5		2 hr	1 hr

	Parasitosis and Infection Diseases	Ch16.1~16.9			
	合计 Total			48 hr	
	考试 Exam			2 hr	

18. 教材及其它参考资料 Textbook and Supplementary Readings

教材 Textbooks :

- 1 李玉林, 病理学, 第 9 版, 北京: 人民卫生出版社, 2018
- 2 Vinay Kumar. Robbins Basic Pathology. 10th ed. Elsevier, 2017

参考书 Reference Books :

1. Christopher Fletcher. Diagnostic histopathology of tumors. 4th ed. Elsevier.
2. 李甘地, 病理学, 第 3 版, 北京: 人民卫生出版社, 2017
3. 李玉林, 病理学, 第 8 版, 北京: 人民卫生出版社, 2017



19. 评估形式 Type of Assessment	评估时间 Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
出勤 Attendance		5		
课堂表现 Class Performance		15		
小测验 Quiz		20		
课程项目 Projects				
平时作业 Assignments				
期中考试 Mid-Term Test				
期末考试 Final Exam		60		
期末报告 Final Presentation				
其它 (可根据需要 改写以上评估方 式) Others (The above may be modified as necessary)				

20. 记分方式 GRADING SYSTEM

A. 十三级等级制 Letter Grading
 B. 二级记分制 (通过/不通过) Pass/Fail Grading

课程审批 REVIEW AND APPROVAL

21. 本课程设置已经过以下责任人/委员会审议通过
This Course has been approved by the following person or committee of authority