

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	生理学与病理生理学 II, Physiology and Pathophysiology II
2.	授课院系 Originating Department	医学院, School of Medicine
3.	课程编号 Course Code	MED305
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	中英双语 English & Chinese
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)	陈国安, 副教授, 南方科技大学医学院 cheng@sustech.edu.cn 0755-88018042 Chen Guoan, Associate Professor, School of Medicine, Southern University of Science and Technology Email: cheng@sustech.edu.cn 0755-88018042 刘泉, 副教授, 南方科技大学医学院 liuq3@sustech.edu.cn 0755-88018055 Liu Quan, Associate Professor, School of Medicine, Southern University of Science and Technology Email: liuq3@sustech.edu.cn 0755-88018055
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	无 NA (请保留相应选项 Please only keep the relevant information)

10. Maximum Enrolment (Optional)	选课人数限额(可不填)				
11. 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	45	3			48
12. Pre-requisites or Other Academic Requirements	先修课程、其它学习要求 MED304 生理学与病理生理学 I Pre-requisites: MED304				
13. Courses for which this course is a pre-requisite	后续课程、其它学习规划 无 None				
14. Cross-listing Dept.	其它要求修读本课程的学系 无 None				

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

本课程整合了生理学与病理生理学的内容，将以细胞、器官系统为主线，深入阐明生命机体及其细胞、组织、器官等组成部分所表现的各种生命现象的活动规律和生理功能，机体主要常见疾病过程中可能出现的、共同的功能、代谢变化规律及其机制，以及机体的主要器官系统在多种疾病发生、发展过程中可能出现的常见的、共同的病理过程及主要常见病的发病过程。This is an integrated course of physiology and pathophysiology based on cell, organs and systems. It explains a set of activity patterns and physiological functions of living organisms in cells, tissues and organs, etc. This course also focuses on the physiology of abnormal states; specifically, the functional changes that accompany a particular syndrome or disease.

16. 预达学习成果 Learning Outcomes

1. 掌握机体正常的生命活动规律、生理功能与机制，以及机体内、外环境变化的影响。
To understand normal activity patterns, physiological functions and mechanisms of the organisms, and the effects of internal and external environmental changes (homeostasis) of the organisms.
2. 熟悉生命活动生理现象，呼吸、心跳、血液循环、胃肠运动与分泌、泌尿、出汗、生殖、内分泌等。
To be familiar with physiological phenomena of activities, such as respiration, heartbeat, blood circulation, gastrointestinal movement and secretion, urination, sweating, reproduction, endocrine and so on.
3. 掌握机体异常的生命活动及其规律。
To understand the physiology of abnormal states.
4. 掌握主要常见疾病过程中可能出现的、共同的功能与代谢变化规律及其机制。
To understand the functional changes that accompany a particular syndrome or disease
5. 掌握多种疾病发生发展过程中可能出现的常见的、共同的病理过程及主要常见病的发病过程。
To understand common pathological disease processes in the development of various diseases.

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 呼吸系统 I Respiration I

- 一、肺通气功能和调节 Pulmonary ventilation function and regulation
- 二、肺换气功能 Gas exchanges in lungs
- 三、组织换气（内呼吸） Gas exchanges in tissue (internal respiration)

第二章 呼吸系统 II Respiration II

- 一、气体在血液中的运输 Gas transportation in blood
- 二、缺氧的病理生理 Hypoxia

第三章 呼吸 III Respiration III

- 一、呼吸运动的调节 Regulation of respiration
- 二、呼吸性酸碱平衡和紊乱 Respiratory acid-base balance and imbalance

第四章 呼吸 IV Respiration IV

- 一、急性肺损伤和急性呼吸窘迫综合征 Acute lung injury, acute respiratory distress syndrome
- 二、呼吸衰竭 Respiratory failure

第五章 消化道（胃肠道） Gastrointestinal system

- 一、胃肠道的消化功能 Gastrointestinal system - physiology of digestion
- 二、胃肠道的吸收功能 Gastrointestinal system - physiology of absorption

第六章 消化腺 Digestive glands

- 一、肝胆胰腺的生理 Hepatobiliary and pancreatic Physiology
- 二、肝功能不全和肝性脑病 Hepatic insufficiency and encephalopathy

第七章 肝功能不全的 PBL PBL--Hepatic insufficiency and encephalopathy

第八章 泌尿系统 I Urinary System I

- 一、肾脏生理 Kidney physiology
- 二、肾功能的调节 Regulation of kidney function

第九章 泌尿系统 II Urinary System II

- 一、尿的生成和调节 Urine formation and regulation
- 二、水、电解质和酸碱代谢与紊乱 Water, electrolytes and acid-base metabolisms and imbalances

第十章 泌尿系统 III Urinary System III

- 一、急性肾损伤和急性肾衰竭 Acute kidney injury and acute renal failure
- 二、慢性肾功能衰竭终末期肾病的发生 Chronic renal failure and end stage renal disease

第十一章 尿毒症的 PBL PBL-- Uremia

第十二章 内分泌系统 Endocrine System

一、主要内分泌腺和激素的功能和调节 The function and regulation of major endocrine glands and hormones

第十三章 胰岛和血糖调节 Islet and blood glucose

一、胰岛内分泌和血糖调节 Islet endocrine and regulation of blood glucose

二、糖尿病的发生 Development of diabetes mellitus

第十四章 生殖系统 I Reproductive system I

一、男、女生殖功能和调节 Male and female reproductive system - function and regulation

第十五章 生殖系统 II Reproductive system II

一、性生理、妊娠与分娩 Sexual physiology, pregnancy and delivery

第十六章 衰老 Ageing

一、衰老的生理过程 The physiology of ageing

二、老年疾病的发生 Development of geriatric disease

Section	Hour	Teaching Contents
1	3	呼吸 (I-肺通气, 肺换气和组织换气) Respiration (I-pulmonary ventilation, gas exchanges in lungs and in tissue)
2	3	呼吸 (II-气体在血液中的运输, 缺氧) Respiration (II-gas transportation in blood, hypoxia)
3	3	呼吸 (III-呼吸运动的调节与呼吸性酸碱平衡和紊乱) Respiration (III-regulation of respiration, acid-base balance and imbalance)
4	3	呼吸 (IV- ALI, ARDS 和呼吸衰竭和发生) Respiration (IV- ALI, ARDS and Respiratory failure)
5	3	消化道 (胃肠道) Gastrointestinal system
6	3	消化腺 Digestive glands
7	3	肝功能不全的 PBL PBL--Hepatic insufficiency and encephalopathy
8	3	泌尿系统 (I-肾脏生理) Urinary System (I-kidney physiology)
9	3	泌尿系统 (II-尿的生成和调节以及水、电解质和酸碱代谢与紊乱) Urinary System (I-Urine formation and regulation and Water, electrolytes and acid-base metabolisms)
10	3	泌尿系统 (III-急性肾损伤和急、慢性肾衰竭的发生) Urinary System (III-AKI, acute and chronic renal failure)
11	3	尿毒症的 PBL PBL- Uremia
12	3	内分泌系统 (I-主要内分泌腺和激素) Endocrine Physiology (I-major endocrine glands and hormones)
13	3	胰岛和血糖调节 Islet and blood glucose
14	3	生殖系统 (I-男、女生殖功能和调节) Reproductive system (I- Reproductive function and regulation)

15	3	生殖系统 (II-性生理、妊娠与分娩) Reproductive system (II- Sexual Physiology, Pregnancy and Delivery)
16	3	衰老 Ageing

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

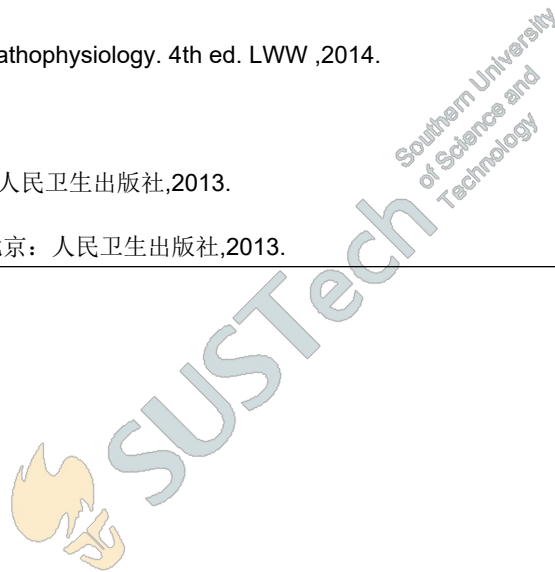
教材 Text book:

Carol Mattson Porth. Essentials of Pathophysiology. 4th ed. LWW ,2014.

参考书 Reference books:

朱大年,王庭槐.生理学.第八版.北京:人民卫生出版社,2013.

王建枝,殷莲华.病理生理学.第八版.北京:人民卫生出版社,2013.



课程评估 ASSESSMENT

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		10		
课堂表现 Class Performance		10		
小测验 Quiz		40		
课程项目 Projects				
平时作业 Assignments				
期中考试 Mid-Term Test				
期末考试 Final Exam		40		
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)				

University

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

