

附件 1：教学大纲的基本格式和内容

Appendix : Format and Content of Course Syllabus

(教学大纲封面) (Cover Page of Course Syllabus)

中山大学
本科教学大纲
Sun Yat-sen University
Undergraduate Course Syllabus

学院 (系)

中山眼科中心

School (Department): Zhongshan Ophthalmology Center

课程名称

眼科学

Course Title: Ophthalmology

二〇一六年

眼科学教学大纲

Course Syllabus: (Ophthalmology)

July 2016

一、课程基本说明 I. Basic Information

课程名称: (中文) 眼科学		(英文) Ophthalmology			
Course Title: Chinese		English			
课程性质 Course Type	专业限选课 Elective Course	课程编码 Course Code	AH6236	学分 Credits	1
授课学时 Class Hours	18	主讲教师(职称) Instructor (Title)	详见课表 See curriculum schedule	开课单位 Offered By	中山眼科中心 ZOC
面向专业 Target Students	临床医学五年制、影像学、法医 clinical medicine five year, Imaging, forensic medicine	授课年级 Year of Students	2016	先修课程 Prerequisite Course(s)	无 None
课程目的与教学基本要求 Course Objective and Requirements	<p>本教学大纲是按五年制医疗专业眼科教学时数编写，着重培养学生“知识、素质、能力”，坚持从实际出发，学以致用原则，培养和提高学生临床能力。教学方法采用课堂讲授与见习相结合，理论联系实际，大纲要求掌握内容都在课堂讲授，要求了解部分内容可在见习中结合病例介绍，或者通过视频、自学等方式了解。对外语水平的要求，五年制学生要掌握常用的眼科学解剖名词、疾病名称、特殊检查等专业英文名词，自学专业英语课外阅读教材。</p> <p>通过眼科学的学习，学生要掌握眼球解剖、部分的眼科检查法及常见病、多发病的诊断及防治知识，熟悉急性和慢性视力减退的眼病，理解全身病在眼部的表现及眼病与全身病的关系，了解防盲治盲工作的意义和眼科工作者努力的方向。</p> <p>This syllabus is based on clinical ophthalmology teaching hours for five-year students, and will focus on cultivating students' "knowledge, quality and ability of sustainable development", students are required to master basic ophthalmology knowledge, comprehensive clinical ability and major advances in ophthalmology. A combined teaching method of class teaching and probation is used to integrate theory with practice. Contents requirements and major new advances are included in class</p>				

	<p>teaching, contents required to be understand are included in probation or through video learning or self-learning. Foreign language level demand for: the five-year students need to master the commonly used terms in ophthalmology anatomy, disease and special examinations. They should be capable of self-studying professional English extracurricular reading materials.</p> <p>After studying ophthalmology, the students should master the normal eye anatomy, basic common eye examinations, diagnosis and prevention of common eye diseases; have a strong clinical analysis and preliminary treatment ability towards acute and chronic vision impairment diseases; understand the ocular presentations of systemic disease and the association between ocular and systemic disease; understand the importance of blind prevention and latest advances in ophthalmology. English requirements: master English terms of ocular anatomy, common eye disease and special examination/procedures.</p>
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二、课程基本内容 II. Course Content

(一) 课程内容 i. Course Content

讲解内容 Contents	学时 Hours
眼的解剖生理及眼科检查法	2
Ocular anatomy and ophthalmic examinations	
“眼睑病”、“结膜病”、“泪器病”	2
Eyelid, lacrimal apparatus and conjunctival diseases	
“眼表疾病”“角膜病”“巩膜病”	2
Eye surface disease, corneal diseases and scleral diseases	
“青光眼”	2
Glaucoma	
“葡萄膜炎”、“白内障”	2
Uveitis and cataracts	
“眼外伤”	2
Ocular trauma	

“眼底病” 2

Fundus diseases

“眼与全身病”、“眼眶病”、“防盲和治盲” 2

Systemic diseases, orbitopathy and P&T of blindness

(二) 教学环节安排 ii. The Organization of the Course

(对各种教学环节的安排如：实验、实习、习题课、作业等以及本课程与其他相关课程的联系、分工等作必要说明)

(Provide necessary information on the organization of the course, including the experiment, field trip, in-class assignment, after-class assignment, and the relationship between this course and other courses;)

眼科学总教学时数为 54 学时，系统理论讲课 18 学时，见习 36 学时。

Ophthalmology total teaching hours: 18 class hours, theory lecture 24 hours, probation 48 class hours.

1. 根据教学目标的要求指导教学过程中各个环节，包括安排备课，上课，教评和考核等等。

Guide each teaching process based on requirements of the teaching goal, including lesson preparation, class arrangement , teaching evaluation and examination, etc.

2. 根据教务处安排的教学计划，制定大课课程表。详情见本文件最后的课程表

Arrange class syllabus and probation syllabus according to the teaching programs by the education office. More details can be find at the bottom of this document.

(三) 教学方法 iii. Teaching Methodology

(包括课堂讲授、提问研讨，课后习题和答疑等情况)
(Specify the methods of in-classroom instruction, Q&A session and after-class assignment)

课堂讲授：采用现代化可视化教学，理论与教学视频，手术视频相结合，利用直观的图像加深学生的印象，巩固理论知识。

提问及课后答疑：理论课将预留时间给学生提问及讨论，并布置课后思考题，下节课讨论，增加课程连贯性，巩固知识。

Classroom teaching methods:

Using modern multimedia techniques, teaching will include theoretical instruction videos, surgical videos and images to instill a deeper impression on students and to strengthen theoretical knowledge.

At the end of each class, a question and answer session is scheduled to allow students to raise questions and discuss relevant content. Questions will also be raised at the end of each session to be answered in the next class in order to provide transition between classes and promote independent learning in students.

(四) 课程教材 **Teaching Materials or Textbooks**

1、主讲教材 The Main Textbook

赵堪兴主编：眼科学。第八版，人民卫生出版社，北京，2013。

Kan Xing Zhao, Ophthalmology. Eighth Edition, People Hygiene Press, Beijing, 2013

2、辅助教材 Supplementary Materials

眼科学总论 第十六版

paul Riordan-Eva, JohnP.Whitcher:Vaughan & Asbury's General Ophthalmology, Sixteen Edition, McGraw-Hill Education,2004

(五) 主要参考书目 **References for Further Reading**

(要求推荐若干参考书，并注明书名、作者、出版社、版本、出版日期等)

(Please list the references for further reading in APA format)

1. 葛坚主编：眼科学。八年制规划教材，人民卫生出版社，北京，2002。

2. 刘祖国主编：眼科学基础。人民卫生出版社，北京，2004。

3. 李凤鸣主编：中华眼科学。人民卫生出版社，北京，2005。

4. 刘家琦、李凤鸣主编：实用眼科学。人民卫生出版社，北京，2005。

1. Jian Ge, Ophthalmology. Eight-year program, People Hygiene Press, Beijing, 2002.

2. Zuguo Liu, Ophthalmology basis. People Hygiene Press, Beijing, 2004.

3. Fengming Li, Chinese Ophthalmology. People Hygiene Press, Beijing, 2005.

4. Jiaqi Liu, Practical Ophthalmology. People Hygiene Press, Beijing, 2005

(六) 成绩评定方式 Evaluation and Grading Policy

大课学习结束后，对本专业作全面的理论考核(笔试)。

After the class teaching, carry out a comprehensive theoretical examination (written test).

注：教学大纲一律使用A4纸，正文为小四号宋体。

第一章 绪言

目的与要求:

明确眼科学在医学与人类健康中的地位以及学习眼科学的必要性。

内容:

1. 眼科学在医学领域中的地位: 阐明眼科学的独特性及与全身其它系统疾病的联系。阐述眼科疾病对人类健康危害的普遍性与严重性。
2. 简述我国眼科学临床与基础研究的现状及与国际眼科学的差距。
3. 简述我国眼科学发展历史与国家科学技术、经济发展的关系。

Chapter 1 Introduction

Objective and Requirements:

Introduce the importance of Ophthalmology in medical science.

Contents:

1. The position of Ophthalmology in medical field: Clarify the uniqueness of Ophthalmology and the relation between eyes and other systemic diseases. To conclude the universality and severity of the eye diseases hazard on human health.
2. To conclude the situation of ophthalmic clinical and basic research in China, and the distance between international ophthalmology.
3. To conclude the relationship between the development of ophthalmology and the development of technology and economy.

第二章 眼的发育生物学

目的与要求:

掌握眼球壁各层的起源, 了解眼的胚胎发育及其与眼病的关系。

内容:

简述眼胚胎发育。

Chapter 2 Developmental biology of Ophthalmology

Objective and Requirements:

Grasp the origin of each layer of eye ball, understand the relationship between

embryonic development and eye diseases.

Contents:

To conclude the embryonic development of the eye

第三章 眼的解剖、生理

目的与要求:

掌握眼的各部分组织的解剖结构、生理功能及其临床意义。

内容:

1. 眼球及附属器的临床解剖、组织结构、生理功能及临床意义。
2. 视神经解剖、视路、瞳孔反射及其生理特点。
3. 眼的血液供应及神经支配。

Chapter 3 Anatomy and physiology of eye

Objective and Requirements:

Grasp the anatomical structure, physiological function and clinical significance of each tissue of the eye.

Contents:

1. Anatomy, tissue structure, physiological function and clinical significance of the eye ball and its adnexa
2. Anatomy of optic nerve, visual pathway, pupillary reflex and its physiological characteristics.
3. The blood supply and innervation of the eye.

第四章 眼科检查法

目的与要求:

1. 了解眼科检查法原理及对疾病诊断的意义。
2. 掌握眼科常规检查法的操作及记录方法。

内容:

1. 眼科常规检查法的操作及其记录方法。
2. 眼科特殊检查的基本原理、应用范围及其临床意义。

Chapter 4 Ophthalmic Examination

Objective and Requirements:

1. Understand the theory of eye examination and its clinical significance of diagnosis.
2. Grasp the operation and record method of basic eye examination

Contents:

1. Operation and record method of basic eye examination
2. Fundamental, indication and clinical significance fo specific eye examination

第五章 眼睑病

目的与要求:

1. 掌握睑腺炎、眼睑位置异常的诊断及治疗方法。
2. 掌握睑闭合不全时保护角膜的措施及其重要性。
3. 了解眼睑良性肿瘤及恶性肿瘤的临床表现和处理原则。

内容

1. 眼睑炎症：外睑板腺炎、内睑板腺炎和睑板腺囊肿（霰粒肿）。
2. 睑缘炎：鳞屑性、溃疡性、眦部睑缘炎。
3. 睑皮炎：病毒性睑皮炎、接触性睑皮炎。
4. 睑与睫毛位置异常：睑内翻、睑外翻、睑闭合不全、上睑下垂、倒睫与睫毛乱生。
5. 睑肿瘤：良性肿瘤包括血管瘤、色素痣、黄色瘤；恶性肿瘤包括基底细胞癌、鳞状上皮癌、皮脂腺癌。

Chapter 5 Eye Lids

Objectives and Requirements:

1. Grasp the diagnosis and treatment of hordeolum and anatomic deformities of the eye lids.
2. Grasp the treatment of hypophasis and understand the significance of cornea protection

Contents:

1. Inflammations of the eye lids: external hordeolum, internal hordeolum and

- chalazion.
2. Blepharitis: squamous blepharitis, ulcerative blepharitis and angular blepharitis.
 3. Eyelid dermatitis: viral palpebral dermatitis, contact eyelid dermatitis
 4. Anatomic deformities of the eye lids and eye lashes: entropion, ectropion, hypophasis, ptosis, trachiasis and aberrant lashes.
 5. Eyelid tumor: benign tumor: hemangioma, pigmented nevus, xanthoma. Malignant tumor: basal cell carcinoma, squamous cell carcinoma and sebaceous gland carcinoma

第六章 眼表疾病

目的与要求:

1. 认识眼表疾病对视觉功能的损害性及其在防治眼病中的重要性。
2. 掌握常见眼表疾病（干眼、角膜缘干细胞功能衰竭）的病因、临床表现和治疗。
3. 熟悉角膜缘干细胞的基本理论，眼表疾病的概念及诊断。
4. 掌握干眼的诊断和治疗原则。

内容:

1. 眼表重建的基本理论。
2. 常见的眼表疾病类型及治疗原则。
3. 干眼症。

Chapter 6 Ocular surface diseases

Objectives and Requirements:

1. Understanding ocular surface diseases is a potential cause of blindness and the significance of prevention.
2. Grasp the cause, manifestation and treatment of common ocular surface diseases (dry eye, limbal stem cell failure).
3. Be familiar with basic theories of limbal stem cell, the concept and diagnosis of ocular surface diseases.
4. Grasp the diagnosis and treatment principles of dry eye.

Contents:

1. The basic theory of ocular surface reconstructin.
2. Classifications and treatment principles of common ocular surface diseases.
3. Dry eye.

第七章 泪器病

目的与要求:

1. 掌握泪道病的检查法。泪道冲洗
2. 熟悉慢性泪囊炎对眼球尤其内眼手术的潜在危险；掌握诊断及处理原则。
3. 了解急性泪腺炎是眶蜂窝织炎的主要原因，泪腺肿瘤是突眼的主要病因之一。

内容:

1. 泪道病：泪道阻塞、慢性泪囊炎、急性泪囊炎、新生儿泪囊炎、泪小管炎。
2. 急性泪腺炎。
3. 泪腺肿瘤：泪腺混合瘤、泪腺囊样腺癌。

Chapter 7 Lacrimal apparatus disease

Objectives and Requirements:

1. Grasp the examination of lacrimal disease.(irrigation of lacrimal passage)
2. Grasp the potential risk of the chronic dacryocystitis to the eye balls and eye surgeries. Grasp the diagnostic method and treating principles.
3. Understand the acute dacryoadenitis is a major cause of orbital cellulitis. Lacrimal gland tumor is one of the leading causes of exophthalmos.

Contents:

1. Lacrimal passage disease: lacrimal passage obstruction, chronic dacryocystitis, acute dacryocystitis, neonatal dacryocystitis, canaliculitis.
2. Acute dacryoadenitis
3. Lacrimal gland tumor: lachrymal mixed tumor, lacrimal sac adenocarcinoma.

第八章 结膜病

目的与要求:

1. 掌握常见结膜炎，诊断及防治原则。
2. 认识沙眼的传染途径及其危害性，掌握沙眼诊断及其并发症、后遗症的处理和防治原则。
3. 认识超急性细菌性结膜炎的传播途径和严重危害性，掌握治疗和隔离方法。
4. 熟悉免疫性结膜炎的种类和临床特点，掌握春季卡他性结膜炎的诊断和治疗原则。

内容:

1. 结膜炎概述：病因、分类、临床表现、诊断方法、治疗原则及预防措施。
2. 细菌性结膜炎：超急性细菌性结膜炎、急性卡他性结膜炎、慢性卡他性结膜炎。
3. 衣原体性结膜炎：沙眼、包涵体性结膜炎。
4. 病毒性结膜炎：流行性角结膜炎、流行性出血性结膜炎。
5. 免疫性结膜炎：泡性角结膜炎、春季结膜炎、过敏性结膜炎。
6. 其他结膜病：结膜干燥症、翼状胬肉、睑裂斑、结膜结石。
7. 结膜肿瘤：结膜色素痣、结膜乳头状瘤、皮样脂肪瘤、结膜血管瘤、结膜鳞状细胞癌、结膜黑色素瘤。

Chapter 8 Conjunctival diseases

Objectives and Requirements:

1. Grasp the diagnosis and treatment of common types of conjunctivitis.
2. Understand of contaminating pathway of trachoma and the damage it might cause. Grasp the diagnosis, complication, sequelae, and prevention of trachoma.
3. Understand of transmission of hyperacute conjunctivitis and its harmfulness. Grasp the treatment and isolation method.
4. Be familiar with the classification and clinical features of conjunctivitis caused by immune disorder. Grasp the diagnosis and treatment of vernal keratoconjunctivitis.

Contents:

1. Conjunctivitis overview: cause, classification, manifestation, treatment and prevention.
2. Bacterial conjunctivitis: hyperacute bacterial conjunctivitis, acute catarrhal conjunctivitis, chronic catarrhal conjunctivitis.
3. Chlamydia conjunctivitis : trachoma.
4. Virus conjunctivitis: epidemic keratoconjunctivitis, epidemic hemorrhagic conjunctivitis.
5. Immunologic conjunctivitis: phlyctenular keratoconjunctivitis, vernal keratoconjunctivitis, allergic conjunctivitis.
6. Other conjunctival diseases: conjunctival xerosis, pterygium, pinguecula, conjunctival concretion.
7. Conjunctival tumors: conjunctival pigmented nevus, conjunctival papilloma, dermoid lipoma, conjunctival hemangioma, conjunctival squamous cell carcinoma, conjunctival melanoma.

第九章 角膜病

目的与要求:

1. 认识角膜病是我国主要致盲眼病之一及角膜病在防盲治盲工作中的重要意义。
2. 掌握角膜炎的病变发展规律及临床表现。
3. 掌握角膜炎及其后遗症的治疗原则及预防措施。
4. 掌握细菌性、真菌性、单疱病毒性角膜炎的鉴别诊断和治疗原则。
5. 熟悉蚕蚀性角膜溃疡诊断要点和治疗原则。
6. 了解角膜变性和常见营养不良的诊断要点。

内容:

1. 角膜炎概述: 病因、分类、经过、临床表现、后遗症、诊断方法(包括临床检查与化验检查)、治疗原则(药物与手术)、预防措施。
2. 细菌性角膜溃疡: (革兰氏阳性球菌性角膜溃疡、革兰氏阴性细菌性角膜溃疡)。
3. 真菌性角膜炎。

4. 单疱病毒性角膜炎。
5. 棘阿米巴性角膜炎。
6. 角膜基质炎。
7. 蚕蚀性角膜溃疡。
8. 角膜软化症。
9. 角膜先天性异常、肿瘤、变性、营养不良。
10. 角膜接触镜及相关并发症。
11. 药物眼局部使用的角结膜毒性。
12. 角膜屈光手术并发症。

Chapter 9 Cornea

Objectives and Requirements:

1. Understand that corneal disease is one of major causes of blindness in China and the importance of corneal diseases' prevention.
2. Grasp the development of keratitis and its manifestation
3. Grasp the treatment and prevention of keratitis and its sequelae.
4. Grasp the differential diagnosis and treatment principles of bacterial keratitis, fungal keratitis and herpes simplex virus keratitis.
5. Be familiar with the diagnosis key points and treatment principles of corrosion corneal ulcer.
6. Understand the diagnostic key point of cornea degeneration and common malnutrition.

Contents:

1. Keratitis overview: causes, classification, process, manifestation, sequelae, diagnosis (including clinical exams and lab tests), treatment (medication and surgery), and prevention.
2. Bacterial corneal ulcer: (G+ cocci corneal ulcer, G- cocci corneal ulcer)
3. Fungal keratitis.
4. Herpes simplex virus keratitis.
5. Acanthamoeba keratitis.
6. Interstitial keratitis.
7. Mooren's ulcer

8. keratomalacia
9. Congenital corneal abnormalities, tumor, degeneration, malnutrition
10. Contact lens and its complications.
11. Corneal toxicity of tropical medication
12. Complications of corneal refractive surgery

第十章 巩膜病

目的与要求:

了解浅层巩膜炎, 巩膜炎的临床表现和治疗方法。

内容:

1. 表层巩膜炎症: 结节性表层巩膜炎, 周期性表层巩膜炎。
2. 巩膜炎: 前巩膜炎、后巩膜炎。

Chapter 10 Sclera diseases

Objectives and Requirements:

Understand the clinical manifestation and treatment of episcleritis and scleritis.

Contents:

1. Episcleritis: Nodular episcleritis, periodic episcleritis.
2. Scleritis: anterior scleritis, posterior scleritis.

第十一章 晶状体病

目的与要求:

- 1.掌握白内障的分类、临床表现、诊断和常用的治疗方法。
- 2.掌握白内障的检查方法。
- 3.了解白内障的病因。
- 4.了解晶状体脱位、晶状体异形的诊断与治疗。

内容:

1. 白内障定义、检查方法、病因和分类, 临床表现。
2. 年龄相关性白内障。
3. 先天性白内障。
4. 外伤性白内障。

5. 代谢性白内障。
6. 并发性白内障。
7. 药物中毒性白内障。
8. 后发性白内障。
9. 白内障的治疗，包括药物治疗与手术治疗。
10. 晶状体异位、脱位和异形。

Chapter 11 Lens diseases

Objectives and Requirements:

1. Grasp the classification, manifestation, diagnosis and common treatment of cataract.
2. Grasp the examinations of cataract.
3. Understand the etiology of cataract.
4. Understand the diagnosis and treatment of lens dislocation, lens deformities.

Contents:

1. Definition, examination, etiology, classification, manifestations of cataract.
2. Age-related cataract
3. Congenital cataract
4. Traumatic cataract
5. Metabolic cataract
6. Complicated cataract
7. Medication toxic cataract
8. Posterior capsule opacification
9. Medication and surgery treatment of cataract
10. Ectopia, dislocation and deformities of lens

第十二章 玻璃体病

目的与要求:

1. 用检眼镜检查玻璃体混浊。
2. 了解玻璃体混浊的各种病因的年龄性改变。
3. 熟悉玻璃体积血的病因。
4. 了解玻璃体炎症。

5. 了解玻璃体混浊的治疗(包括现代玻璃体切割术及微创玻切)。

内容:

1. 生理性飞蚊症。
2. 玻璃体混浊。
3. 玻璃体出血原因及治疗原则。
4. 现代玻璃体切割术及新进展。

Chapter 12 Vitreous diseases

Objectives and Requirements:

1. Check vitreous opacity with ophthalmoscope.
2. Understand the causes of vitreous opacity and its relation to age.
3. Be familiar with the causes of vitreous hemorrhage.
4. Understand vitreous inflammation.

Contents:

1. Physiological floaters.
2. Vitreous opacity.
3. Causes and treatment principles of vitreous hemorrhage.
4. New progress in modern vitreous cutting techniques.

第十三章 青光眼

目的与要求:

1. 认识青光眼是常见致盲性眼病和早期诊断、早期治疗的意义。
2. 掌握眼压的概念，房水循环途径和主要影响因素。
3. 掌握青光眼的定义和分类。
4. 掌握急性闭角型青光眼的临床表现、诊断、鉴别诊断、临床分期及急诊处理原则和治疗方法。
5. 熟悉原发性开角型青光眼的临床特点和防治新进展。
6. 熟悉原发性青光眼的治疗原则及方法。
7. 了解继发性青光眼的定义。
8. 了解先天性青光眼的临床表现。

内容:

1. 青光眼概述：定义、眼压的概念及正常值范围、高眼压症及正常眼压性青光眼的概念、房水循环途径、影响眼压的因素、青光眼视神经损害的机制、青光眼的分类。
2. 急性闭角型青光眼：病因、临床分期、临床表现、诊断与鉴别诊断、治疗原则。
3. 慢性闭角型青光眼：简单介绍。
4. 原发性开角型青光眼：病因、临床表现、诊断及早期诊断的重要性、治疗原则。
5. 原发性青光眼的药物与手术治疗、激光治疗。
6. 继发性青光眼：定义、角膜炎、葡萄膜炎、晶状体病、外伤、新生血管青光眼等所致继发青光眼的临床特征。
7. 先天性青光眼：临床特点与处理原则。

Chapter 13 Glaucoma

Objectives and Requirements:

1. Understand that glaucoma is a common disease that leads to blindness, and the significance of early diagnosis and treatment.
2. Grasp the concept of intraocular pressure (IOP), the circulation pathway of aqueous humor and its main effect factors.
3. Grasp the definition and classification of glaucoma.
4. Grasp the manifestation, diagnosis, differential diagnosis, phases, emergent principles and methods of acute angle closure glaucoma.
5. Be familiar with the clinical characteristics and advances in the prevention and treatment in primary open angle glaucoma.
6. Be familiar with the treating principles methods of Primary glaucoma.
7. Understand the definition of secondary glaucoma.
8. Understand the clinical findings of congenital glaucoma.

Contents:

1. An overview of glaucoma: definition, the concept of IOP and its normal range, the concept of ocular hypertention and normal tension glaucoma, the circulation pathway of aqueous humor, effect factors of IOP, mechanisms of glaucoma neural damage and the classification of glaucoma.

2. Acute angle closure glaucoma: etiology, clinical stages, clinical manifestations, diagnosis, differential diagnosis and treating.
3. Chronic angle closure glaucoma: brief introduction.
4. Primary open angle glaucoma: etiology, clinical manifestations, diagnosis, the significance of early diagnosis and treating principles.
5. Medical, surgical and laser treatment of primary glaucoma.
6. Secondary glaucoma: definition, the clinical characteristics of secondary glaucoma caused by keratitis, uveitis, lens disease, trauma, neovascular glaucoma, etc.
7. Congenital glaucoma: clinical characteristics and treating principles.

第十四章 葡萄膜疾病

目的与要求:

1. 认识葡萄膜炎是常见致盲眼病、早期诊断、及时合理治疗的意义。
2. 掌握常见类型葡萄膜炎的基本症状、体征、治疗原则和鉴别诊断。
3. 了解几种常见特殊类型葡萄膜炎的临床特点和治疗原则。

内容:

1. 葡萄膜炎概述: 定义、病因、分类。
2. 前葡萄膜炎: 临床表现; 并发症及诊断和治疗原则、鉴别诊断。
3. 中间葡萄膜炎、后葡萄膜炎、全葡萄膜炎的基本概念和常见临床表现。
4. 几种常见特殊类型葡萄膜炎的诊断和治疗原则: 强直性脊椎炎伴发的葡萄膜炎、Vogt-小柳原田病、Behcet 病、Fuchs 综合症和急性视网膜坏死综合征。
5. 先天性异常: 无虹膜、虹膜缺损、瞳孔残膜、脉络膜缺损。

Chapter 14 Uveal diseases

Objectives and Requirements:

1. Understand that uveitis is a common cause of blindness. Understand the importance of early diagnosis and proper treatment.
2. Grasp the basic signs, symptoms, treatment principle and differential diagnosis of common types of uveitis.

3. Understand the clinical characteristics and treatment principle of several special types of uveitis.

Contents:

1. Overview of uveitis: definition, etiology, classification.
2. Anterior uveitis: clinical manifestations; complications, diagnosis, differential diagnosis and treatment principles.
3. The basic concept and common clinical manifestations of intermediate uveitis, posterior uveitis, panuveitis.
4. Diagnosis and treatment principles of several common special types of uveitis: ankylosing spondylitis with uveitis, Vogt-Koyanagi-Harada disease, Behcet's disease, Fuchs syndrome and acute retinal necrosis syndrome.
5. Congenital abnormalities: aniridia, iridocoloboma, persistent pupillary membrane, coloboma of choroid.

第十五章 视网膜病

目的与要求:

1. 掌握视网膜病变的基本症状与体征。
2. 熟悉几种常见视网膜病的临床表现及诊疗原则。
3. 了解视网膜病变和某些全身疾病的密切关系。
4. 了解视网膜病变的基本检查法。
5. 了解玻璃体视网膜病及近来的重大新进展。

内容:

1. 视网膜病概述: 解剖生理特点、病变类型。
2. 视网膜血管病: 视网膜中央静脉阻塞、视网膜中央动脉阻塞。
3. 视网膜脱离(孔源性、牵拉性、渗出性)。
4. 视网膜静脉周围炎。
5. 原发性视网膜色素变性。
6. 常见黄斑部病变(年龄相关性黄斑病变、黄斑裂孔、黄斑前膜、中心性浆液性视网膜炎)。
7. 视网膜母细胞瘤。
8. 早产儿视网膜病变。

9. 全身循环障碍和代谢障碍的视网膜病变：糖尿病性、高血压性、动脉硬化性、血液病性、妊娠毒血症性、肾炎性。

Chapter 15 Retinal disease

Objective and Requirements:

1. Grasp the symptoms and signs of retinal diseases.
2. Be familiar with the clinical manifestations and treatment principles of several common retinal diseases.
3. Understand the relationship between retinal diseases and systemic diseases.
4. Understand vitreous retinopathy and its recent important new progress.
5. Understand the basic examinations of retinal diseases.

Contents:

1. Overview of retinal diseases: anatomic physiological characteristics, pathology.
2. Retinal vascular disease: central retinal vein occlusion , central retinal artery occlusion.
3. Retinal detachment(rhegmatogenous, tractional, exudative)
4. Periphleitis of retina, Eales's disease
5. Retinitis pigmentosa, RP
6. Common macular degeneration (Age related macular degeneration, macular hole, epiretinal membrane of macula)
7. Retinoblastoma
8. Retinopathy of prematurity
9. Systemic circulatory disturbance and metabolic disorders related retinopathy: diabetes, hypertension, arteriosclerosis, blood disease, pregnancy toxemia, Nephritis.

第十六章 神经眼科学

目的与要求:

1. 常见视神经疾病的病因、临床表现、诊断、鉴别诊断和治疗原则。
2. 了解病理性瞳孔异常的临床特点。

内容:

1. 视神经炎：视神经乳头炎、球后视神经炎的病因、临床表现、诊断、鉴别诊断、治疗原则。
2. 缺血性视神经病变：病因、临床表现、诊断和治疗原则。
3. 视乳头水肿：概念、病因、临床表现、鉴别诊断和治疗原则。
4. 视神经萎缩：临床表现、诊断、治疗原则。
5. 视路及视中枢病变：视野特点，皮质盲的概念。
6. 影响瞳孔大小的因素。
7. 瞳孔对光反射的概念、神经通路。
8. 各种常见瞳孔异常的临床意义。

Chapter 16 Neuro-ophthalmology

Objective and Requirements:

1. Etiology, clinical manifestation, diagnosis, different diagnosis and treatment principle of common optic nerve diseases.
2. Understand clinical characteristics of pathological pupil abnormalities

Contents

1. Optic neuritis: Etiology, clinical manifestation, diagnosis, different diagnosis and treatment principle of optic papillitis and retrobulbar neuritis.
2. Ischemic optic neuropathy: Pathogenesis, clinical manifestation, diagnosis and treatment principle.
3. Papilloedema: Concept, etiology, clinical manifestation, different diagnosis and treatment principle.
4. Optic nerve atrophy: Clinical manifestation, diagnosis and treatment principle.
5. Visual pathway and visual center diseases: Visual field characteristics, Concept of cortical blindness.
6. Factors affect pupil size.
7. Concept of pupillary light reflex and neural pathway.
8. Clinical significance of common pupil abnormalities.

第十七章 眼视光学

目的与要求

1. 了解眼球光学系统的基本概念、眼的调节与集合的基本概念。
2. 了解各种屈光不正的分类、定义、各种屈光不正临床表现及矫正方法，老视概念和矫治法。
3. 了解青少年近视的预防和治疗的重要性。
4. 认识调节与屈光的关系，调节与年龄的关系。
5. 验光与配镜方法、了解各种屈光手术的基本状况。
6. 了解接触镜的分类，优缺点、适应症、禁忌症及并发症。

内容：

1. 正常眼球屈光状态及屈光不正的类型；屈光不正的矫治法。
2. 眼球的发育和屈光的演变，青少年近视的防治。
3. 调节与老视。
4. 简介屈光检查方法与配镜。
5. 各种屈光手术的方法、适应证和优缺点。
6. 软性角膜接触镜、硬性角膜接触镜、角膜塑形镜

Chapter 17 Optometry

Objective and Requirements:

1. Understand basic concept of optical system of eye, concepts of eye accommodation and convergence.
2. Understand the classification and concept of all kind of refractive errors, and their clinical manifestation and correction, the concept of presbyopia and its management.
3. Understand the importance of prevention and treatment of myopia among teenagers.
4. Understand the relationship between accommodation and convergence, and the relationship between accommodation and age.
5. Know the method of refraction and basic information about refractive error surgery.
6. Understand the classification the advantage and disadvantage, indication,

contraindication and complication of contact lens.

Contents:

1. Normal refractive condition and classification of refractive errors; correction of refractive error.
2. Development of eye ball and optical system, prevention and treatment of myopia among teenagers.
3. Accommodation and presbyopia.
4. Introduction of refraction method and correction by spectacle lens.
5. Different type of refractive surgery, their indications, advantage and disadvantage.

第十八章 眼外肌病和弱视

目的与要求:

1. 了解共同性斜视与麻痹性斜视的诊断和鉴别诊断。
2. 了解斜视的治疗原则和手术原则。
3. 弱视的定义，了解弱视早防早治的重要性。
4. 各眼外肌的基本解剖知识（生理位置、生理功能和神经支配）。

内容:

1. 两眼单视概念。
2. 斜视的检查方法（重点：斜视度测量、红玻璃试验、眼球运动等）
3. 各类型斜视临床表现、诊断要点、矫治原则。重点是共同性斜视、麻痹性斜视和A—V综合征斜视。
4. 弱视的分类、诊断及治疗原则及治疗方法。
5. 简单介绍眼球震颤。

Chapter 18 Disease of extra ocular muscle and amblyopia

Objective and Requirements:

1. Understand the diagnosis and different diagnosis of concomitant strabismus and paralytic strabismus.
2. Understand treatment and surgery principle
3. Understand the definition of amblyopia and the importance of early

prevention and treatment.

4. Understand basic anatomy information about extra ocular muscles (physiological position, physiological function and eneurpsis).

Contents:

1. The concept of haploopia.
2. Clinical examination of strabismus (Key: Angle of strabismus measurement, red glasses test, ocular movement, etc.).
3. Clinical manifestation, diagnosis, management principle of different type of strabismus. Key: concomitant strabismus, paralytic strabismus and A-V syndrome.
4. The classification, diagnosis and treatment of amblyopia.
5. Brief introduction of nystagmus.
- 6.

第十九章 眼眶病和眼眶肿瘤

目的与要求:

1. 了解眼眶与邻近组织的关系。认识眼球突出的临床意义及与全身病关系。
2. 熟悉眶蜂窝织炎的病因、临床表现及治疗原则
3. 了解常见眼眶肿瘤的特征和处理原则。

内容:

1. 简述眼眶的解剖结构及其邻近组织的关系。
2. 眶蜂窝组织炎的病因、临床表现、治疗及并发症。
3. 常见眼眶肿瘤的临床症状、诊断方法、治疗原则。(重点: 血管瘤、皮样囊肿、脑膜瘤及泪腺恶性肿瘤)。
4. 常见眶颅外伤有关的眼眶病(颈动脉海绵窦瘘、眼眶骨折)。

Chapter 19 Orbital diseases and tumors

Objective and Requirements:

1. Understand the relationship between orbit and its nearby tissues, clinical significant of protopsis and its relationship between systemic diseases.
2. Be familiar with the etiology, symptoms, signs and treatment of orbital

cellulitis.

3. Understand Clinical significant and management principle of orbital tumors.

Contents:

1. Brief introduction of the anatomy of orbit and the relationship between orbit and its nearby tissues.
2. The etiology, clinical manifestation and management principles and complication of orbital cellulitis.
3. Clinical symptom, diagnosis and management principles of orbital tumor. (Key: hemangioma, dermoid cyst, meningeoma and lacrimal malignant tumor)
4. Common orbital diseases cause by orbital and cranial injury (cartid-cavernous fistula, orbital fracture)

第二十章 眼外伤

目的与要求:

1. 认识眼外伤对视功能的危害以及预防的重要性。
2. 掌握常见眼挫伤的临床表现、视功能危害以及治疗原则。
3. 掌握贯通性眼外伤的临床特点与急诊处理，并发症的预防与治疗。
4. 掌握眼前部及表浅组织异物的治疗。
5. 掌握眼内异物伤的临床特点、诊断、并发症与治疗原则。
6. 掌握化学性眼外伤以及电光性眼炎的急症处理。

内容:

1. 眼外伤的临床分类、病史采集、检查、诊断与急诊处理原则。
2. 眼外伤对视功能的危害与预防。
3. 眼钝挫伤的定义，常见眼前段挫伤、眼后段挫伤的临床表现、视功能危害与治疗。
4. 视神经挫伤的临床表现与治疗。
5. 眼球破裂的表现与治疗原则。
6. 贯通性眼外伤的临床特点与急诊处理，并发症的预防与治疗。
7. 眼前部及表浅组织异物的诊断与治疗。
8. 眼内异物伤的临床特点、诊断、并发症与治疗原则。

9. 眶内异物的诊断与治疗原则。
10. 常见眼附属器外伤。
11. 眼酸碱化学伤的临床表现、分度、急救与治疗。
12. 其它眼外伤：热烧伤、电光性眼炎及可见光损伤等。

Chapter 20 Trauma

Objective and Requirements:

1. Understand the harm of eye trauma to visual function and its prevention.
2. Grasp the clinical manifestation, visual harm and treatment principle of contusions eye injury.
3. Grasp penetrating ocular injury and its clinical manifestation, emergency management and prevention and treatment of its complications.
4. Grasp the treatment of anterior segment and superficial foreign body
5. Grasp the clinical manifestation, diagnosis, complication and treatment principle of intraocular foreign body
6. Grasp ocular chemical burn and electric ophthalmia and their emergency management

Contents:

1. Clinical classification, inquiry, examination, diagnosis and emergency management of eye trauma
2. The harm and prevention of visual function of eye trauma
3. The concept of contusion eye injure, comment anterior segment contusion, posterior segment contusion, and its clinical manifestation, treatment of visual function damage.
4. Clinical manifestation and management of optic nerve contusion.
5. Clinical manifestation and management principle of ocular rupture
6. Emergency management of penetrating ocular injury prevention and treatment of its complications
7. The diagnosis and treatment of anterior segment and superficial foreign body
8. The clinical manifestation, diagnosis, complication and treatment principle of intraocular foreign body
9. The diagnosis and treatment principle of intra-orbital foreign body
10. Common injury of eye appendage.

11. Ocular chemical burn and its clinical manifestation, grading, emergency management and complication
12. Other eye injury: heat burn, electric ophthalmia and visible light injury

第二十一章 常见全身性疾病的眼部表现

目的与要求:

1. 认识眼科和各科之间密切关系。
2. 了解各科中常见病（尤其是致盲致残疾病）的一些眼部表现及处理原则。

内容:

1. 眼与内科病：糖尿病、高血压动脉硬化、肾炎、维生素缺乏、白血病、结核病、甲状腺相关眼病。
2. 眼与外科病：颅脑损伤。
3. 眼与儿科病：早产儿
4. 眼与妇科病：妊娠中毒症。
5. 眼与皮肤科病：梅毒
6. 眼与神经科病：重症肌无力、脑血管病、脑肿瘤
7. 眼与口腔科病：齿槽脓肿。
8. 眼与耳鼻喉科病：鼻窦炎、鼻窦肿瘤、鼻咽癌。
9. 眼与药物反应：皮质类固醇、乙胺丁醇。

Chapter 21 Systemic diseases and the eye

Objective and Requirements:

1. Know the relationship between ophthalmology and other department.
2. Know common general diseases which affect the eyes (especially some blinding diseases)

Contents:

1. Eye and internal diseases: diabetes, hypertension arteriosclerosis, nephritis, hypovitaminosis, leukemia, tuberculosis, thyroid- associated ophthalmopathy.
2. Eye and surgical diseases: cerebral injury.
3. Eye and pediatric diseases: premature
4. Eye and gynecological diseases: toxemia of pregnancy

5. Eye and dermatological diseases: syphilis
6. Eye and neurological diseases: myasthenia gravis, crebrovas disease, brain tumor
7. Eye and stomatological diseases: dental alveola abscess
8. Eye and E.N.T diseases: nasosinusitis, paranasal sinus tumor, nasopharyngeal carcinoma.

Eye and drug reaction: corticosteroids, ethambutol.

第二十二章 眼科用药

目的与要求:

1. 掌握药物应用适应症。
2. 掌握配伍注意事项和不良反应。
3. 了解眼科常用药物的作用机制和药代动力学。

内容:

1. 眼科常用给药方式与效果。

眼局部给药方式：局部外用、眼周注射、眼球内注射。

全身给药：口服、肌注和静脉注射。

2. 眼科药物动力学

滴眼剂

眼旁注射

眼内注射

全身注射

3. 眼科常用药物

(1)局部麻醉药。

(2)散瞳剂和睫状肌麻痹剂。

(3)眼科抗感染药。

(4)眼部滴用的糖皮质激素和非甾体抗炎药。

(5)眼部滴用的其它抗过敏药。

(6)青光眼用药。

(7)其它血管收缩剂、人工泪液及诊断用颜料。

Chapter 22 Ophthalmic medication

Objectives and Requirements

1. Grasp the indications of drug application.
2. Grasp the compatibility considerations and adverse reactions.
3. Understand the mechanism and pharmacokinetics ophthalmic medication commonly used.

Contents

1. Ophthalmic drug delivery and effect.
 - (1) Tropical drug delivery: local external use, periocular injections, intraocular injection.
 - (2) Systemic drug delivery: oral, muscle injection and intravenous injection.
2. The ophthalmic pharmacokinetics
 - (1) Eye drops.
 - (2) Periocular injections.
 - (3) Intraocular injection.
 - (4) Systemic injection.
3. Drugs commonly used in ophthalmology
 - (1) Local anesthetic.
 - (2) Mydriatic and cycloplegic.
 - (3) Ophthalmic anti-infection drugs.
 - (4) Glucocorticoid and non-steroidal anti-inflammatory drugs (nsaids) eye drops.
 - (5) Other anti-allergy eye drops.
 - (6) Glaucoma medication.
 - (7) Other vasoconstrictor, artificial tears and diagnostic paint.

第二十三章 防盲和治盲

目的与要求:

- 1.掌握盲和低视力的诊断标准。
- 2.了解国内外防盲治盲的主要内容及特点。

内容:

- 1.盲和低视力的统一标准。

- 2.世界防盲治盲状况。
- 3.目前我国主要致盲的眼病，防盲治盲的历史与现状。
- 4.盲与低视力的康复。

Chapter 23 Prevention and treatment of blindness

Objective and Requirements:

1. Grasp diagnosis standard of blind and low vision
2. Understand the main contents and characteristics of the prevention and treatment of blindness in China and abroad.

Contents:

1. The standard of blind and low vision
2. International prevention and treatment of blindness
3. Common blinding eye disease in China, the past and present of the prevention and treatment of blindness
4. Vision rehabilitation

本科五年制《眼科学》课程进度表

Ophthalmology schedule for Five-years Undergraduate Students

周次 Weeks	班别 class	内容 Contents	任课老师 Teachers	职称 Title
1	11~14	绪论、眼解剖与生理 Ocular anatomy and physiology	郑丹莹 Danying Zheng	主任医师 Chief physician
	15~17		钟秀凤 Xiufeng Zhong	研究员 Researcher
	8~10		文峰 Feng Wen	教授 Professor
	4~7		邓新国 Xinguo Deng	副研究员 Associate Research Fellow
2	11~14	眼表疾病 Ocular surface diseases	王智崇 Zhichong Wang	教授 Professor
	4~7		袁进 Jin Yuan	副教授 Associate Professor

	8~10		黄挺 Ting Huang	教授 Professor
	15~17		周世有 Shiyou Zhou	主任医师 Chief physician
3	11~14	晶状体病、葡萄膜病 Lens diseases, Uveal diseases	吴明星 Mingxin Wu	教授 Professor
	4~7		柳夏林 Xialin Liu	主任医师 Chief physician
	15~17		程冰 Bing Chen	教授 Professor
	8~10		林浩添 Haotian Lin	副教授 Associate Professor
4	11~14	青光眼 Glaucoma	葛坚 Jian Ge	教授 Professor
	15~17		余敏斌 Minbin Yu	教授 Professor
	8~10		林明楷 Mingkai Lin	教授 Professor
	4~7		张秀兰 Xiulan Zhang	教授 Professor
5	11~14	眼肌、屈光 Strabismus & Optometry	颜建华 Jianhua Yan	主任医师 Chief physician
	15~17		林小铭 Mingxiao Lin	主任医师 Chief physician
	8~10		康瑛 Ying Kang	副主任医师 Deputy chief physician
	4~7		邓大明 Daming Deng	主任医师 Chief physician

6	11~14	眼底病 Fundus diseases	吕林 Lin Lv	教授 Professor
	4~7		李加青 Jiaqing Li	副教授 Associate Professor
	8~10		丁小燕 Xiaoyan Ding	主任医师 Chief physician
	15~17		金陈进 Chenjin Jin	教授 Professor
7	11~14	眼外伤 Trauma	郑永欣 Yongxi Zheng	教授 Professor
	15~17		龙崇德 Chongde Long	副主任医师 Deputy chief physician
	8~10		袁钊辉 Zhaohui Yuan	副主任医师 Deputy chief physician
	4~7		林晓峰 Xiaofeng Lin	教授 Professor
8	11~14	眼与全身病 Eye and system	杨华胜 Huasheng Yang	教授 Professor
	15~17		卢蓉 Rong Lu	主任医师 Chief physician
	8~10		艾思明 Siming Ai	副主任医师 Deputy chief physician
	4~7		黄丹平 Danping Huang	教授 Professor