

Doctor of Optometry



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Program Description

The mission of the Rocky Mountain University of Health Professions' Doctor of Optometry program is to prepare skilled optometric physicians as leaders and role models who define excellence in optometric medicine, are deeply committed to competent and respectful patient care, ethical and impactful scientific research, and who are engaged in compassionate public service that improves the health of the diverse communities in which they serve. The successful applicant will require a bachelor's degree and meet the prerequisites detailed on the University (future) website (www.rm.edu).

The Doctor of Optometry Program is a traditional campus-based program consisting of 11 consecutive semesters that will prepare students by incorporating traditional optometric training with a progressive medically based curriculum that satisfies the current scope of optometric practice throughout the country and anticipates future advancements in the profession. Rocky Mountain University is the first College of Optometry to utilize the eleven consecutive semester model. This has allowed a more balanced and lighter per semester course load for the students than traditional programs. The goal is to offer the material in a more attainable and retainable manner. Learning experiences will include classroom, laboratory, online, and both on-site and off-site clinical education. There is a total of 185 credit-hours required for the successful completion of the program of which 61.5 credit-hours are dedicated to supervised direct patient care. In all, the program offers 1484 hours of lecture, 615 hours of laboratory, and 2151 hours clinical instruction.

The Rocky Mountain University College of Optometry embraces the University's seven core values of being: Evidence-Based, Learning Centered, Authentic, Service Oriented, Trustworthy, Inclusive, and Collaborative. The Program will not only plan to operate by these values but also instill them into every student as it aligns itself with the Association of Schools and Colleges of Optometry (ASCO) and the [2011 ASCO Report: Attributes of Students Graduating from Schools and Colleges of Optometry](#).

Program Outline

Course Code & Title	Credits
Doctor of Optometry Courses (54 courses, 185 credits required):	
<i>All courses listed are required:</i>	
Optometric Medicine Courses	
OD 511 Ocular Diagnostics and Therapeutics I	3
OD 521 Ocular Diagnostics and Therapeutics II	3
OD 611 Ocular Diagnostics and Therapeutics III	3.5
OD 621 Ocular Diagnostics and Therapeutics IV	3.5
OD 638 Ocular Diagnostics and Therapeutics V	3
OD 512 Family Practice / Primary Care I	3
OD 522 Family Practice / Primary Care II	3
OD 612 Family Practice / Primary Care III	3
OD 622 Internal Medicine I	2
OD 632 Internal Medicine II	2
Vision Sciences Courses	
OD 513 Medical Optics I	2.5
OD 523 Medical Optics II	2.5
OD 613 Medical Optics III	2.5
OD 615 Visual Perception	2
OD 739 Public Health / Epidemiology	2
OD 729 Medical Leadership and Practice Management I	1.5
OD 738 Medical Leadership and Practice Management II	1.5
OD 626 Biostatistics / Medical Research Methodology	2
OD 721 Clinical and Board Review	3
Foundational Medical Sciences Courses	
OD 517 Medical Anatomy I	4
OD 527 Medical Anatomy II	2.5
OD 614 Medical Anatomy III	3
OD 515 Medical Molecular Biology & Genetics	2.5
OD 525 Medical Biochemistry	2.5
OD 623 Medical Physiology I	3.5
OD 633 Medical Physiology II	4
OD 526 Medical Microbiology / Immunology I	2.5
OD 616 Medical Microbiology / Immunology II	2.5
Applied Medical Sciences Courses	
OD 629 Neuroanatomy	2.5
OD 628 Neuro-Ophthalmology I	3
OD 718 Neuro-Ophthalmology II	2.5
OD 734 Neuro-Ophthalmology III	2.5
OD 635 Pharmacology I	3.5
OD 715 Pharmacology II	3.5
OD 713 Medical Pathology I	4
OD 723 Medical Pathology II	4
OD 728 Glaucoma	2.5
OD 733 Medical Pathology III	2.5

Medical Specialties Courses	
OD 716 Surgery I	2.5
OD 735 Surgery II	2.5
OD 720 Pediatrics	2.5
OD 636 Gerontology and Low Vision	2.5
OD 822 Otolaryngology / EENT -OR- SL 630 Service-Learning Experience I -OR- SL 631 Service-Learning Experience II	1
OD 812 Emergency Medicine	1
OD 832 Psychiatry	1
OD 737 Radiology	1
Clinical Courses	
OD 516 Modern Medical Practice	2
OD 637 Integrated Clinical Practice	1.5
OD 712 Principal Clinical Experience I	4
OD 722 Principal Clinical Experience II	4
OD 732 Principal Clinical Experience III	4
OD 811 Advanced Clinical Experience I	16.5
OD 821 Advanced Clinical Experience II	16.5
OD 831 Advanced Clinical Experience III	16.5
<i>If the following six (6) courses are all taken, they can substitute for OD 831</i>	
OD 790 Integrated Clinical Experience II	4
OD 791 Advanced Integrated Clinical Experience II	1.5
OD 792 Integrated Clinical Experience III	4
OD 793 Advanced Integrated Clinical Experience III	1.5
OD 794 Integrated Clinical Experience IV	4
OD 795 Advanced Integrated Clinical Experience IV	1.5
Total Program Required Credits:	185

Curriculum Sequence

Semester	Course	Credits
Semester 1 Summer 2027	OD 511 Ocular Diagnostics and Therapeutics I	3
	OD 512 Family Practice / Primary Care I	3
	OD 513 Medical Optics I	2.5
	OD 517 Medical Anatomy I	4
	OD 515 Medical Molecular Biology & Genetics	2.5
	OD 516 Modern Medical Practice	2
	Semester Total:	17
Semester 2 Fall 2027	OD 521 Ocular Diagnostics and Therapeutics II	3
	OD 522 Family Practice / Primary Care II	3
	OD 523 Medical Optics II	2.5
	OD 527 Medical Anatomy II	2.5
	OD 525 Medical Biochemistry	2.5
	OD 526 Medical Microbiology / Immunology I	2.5
	Semester Total:	16
Semester 3 Winter 2028	OD 611 Ocular Diagnostics and Therapeutics III	3.5
	OD 612 Family Practice / Primary Care III	3
	OD 613 Medical Optics III	2.5
	OD 615 Visual Perception	2
	OD 616 Medical Microbiology / Immunology II	2.5
	OD 614 Medical Anatomy III	3
	Semester Total:	16.5
Semester 4 Summer 2028	OD 621 Ocular Diagnostics and Therapeutics IV	3.5
	OD 622 Internal Medicine I	2
	OD 623 Medical Physiology I	3.5
	OD 628 Neuro-ophthalmology I	3
	OD 626 Biostatistics / Medical Research Methodology	2
	OD 629 Neuroanatomy	2.5
	Semester Total:	16.5
Semester 5 Fall 2028	OD 632 Internal Medicine II	2
	OD 633 Medical Physiology II	4
	OD 638 Ocular Diagnostics and Therapeutics V	3
	OD 635 Pharmacology I	3.5
	OD 636 Gerontology and Low Vision	2.5
	OD 637 Integrated Clinical Practice	1.5
	Semester Total:	16.5
Semester 6 Winter 2029	OD 712 Principal Clinical Experience I	4
	OD 713 Medical Pathology I	4
	OD 718 Neuro-Ophthalmology II	2.5
	OD 715 Pharmacology II	3.5
	OD 716 Surgery I	2.5
	Semester Total:	16.5
Semester 7 Summer 2029	OD 721 Clinical and Board Review	3
	OD 722 Principal Clinical Experience II	4
	OD 723 Medical Pathology II	4
	OD 720 Pediatrics	2.5

	OD 728 Glaucoma	2.5
	OD 729 Medical Leadership and Practice Management I	1.5
	Semester Total:	17.5
Semester 8 Fall 2029	OD 739 Public Health / Epidemiology	2
	OD 732 Principal Clinical Experience III	4
	OD 733 Medical Pathology III	2.5
	OD 734 Neuro-Ophthalmology III	2.5
	OD 735 Surgery II	2.5
	OD 737 Radiology	1
	OD 738 Medical Leadership and Practice Management II	1.5
	Semester Total:	16
Semester 9 Winter 2030	OD 811 Advanced Clinical Experience I	16.5
	OD 812 Emergency Medicine	1
	Semester Total:	17.5
Semester 10 Summer 2030	OD 821 Advanced Clinical Experience II	16.5
	OD 822 Otolaryngology / EENT	1
	Semester Total:	17.5
Semester 11 Fall 2030	OD 831 Advanced Clinical Experience III	16.5
	OD 832 Psychiatry	1
	Semester Total:	17.5
Total Program Required Credits:		185
<i>Five-year deadline for program from completion of start.</i>		

Course Descriptions

Core Courses:

OD 511 Ocular Diagnostics and Therapeutics I (3 credits)

Students begin development of their knowledge and skills in optometric medical care. Ophthalmic medical evaluation and management skills are introduced. A case-based approach to the integration of data will be used to develop critical thinking skills and practical use of data in the development of diagnoses and treatment plans.

OD 512 Family Practice/ Primary Care I (3 credits)

This course introduces the student to medical interviewing techniques, health history content, medical record documentation and preliminary primary care tests. Lecture will incorporate the theory of the procedures and proper sequencing. The laboratory will emphasize the performance of procedures accurately and efficiently.

OD 513 Medical Optics I (2.5 credits)

This course covers fundamental optics, light propagation, and imaging, including lenses, prisms, mirrors, microscopes, telescopes and optical instrument theory with an emphasis on application in ophthalmic medical care. Lab practice will complement the lectures demonstrating how the optical principles can be applied in clinic.

OD 517 Medical Anatomy I (4 credits)

Medical Anatomy I is a course that covers histology and related cell biology of connective, nervous, bone, digestive, cardiac, renal, hepatic, reproductive and integumentary systems. It will begin with developmental anatomy and continue with the regional study of gross anatomy of the central nervous system, general thoracic regions, upper and lower abdomen, upper extremities and the neck. Specific lectures on the microanatomy of the kidneys and liver will be covered to reinforce clinical correlates. Clinical correlates are emphasized when appropriate and radiological imaging is used to reinforce this concept

OD 515 Medical Molecular Biology & Genetics (2.5 credits)

This course is designed to provide a basis for the fundamental understanding of biochemistry and genetics. Diseases will be discussed from genetic, metabolic and/or nutritional viewpoints and compared with normal biochemical processes. The course will explain pathologies at the molecular level and will emphasize certain biochemical principles related to the eye. It will provide the student with the level of contemporary knowledge base that will lead to an understanding of the etiologies and implications of metabolic and inherited conditions with ocular and visual implications.

OD 516 Modern Medical Practice (2 credits)

This course discusses the strategies for successful practice management within the modern medical model, using best business practices. It also includes contemporary and future innovations in the practice of optometric medicine from the development of new technologies and instrumentation, better management strategies, research in

pharmacogenetics, detection of markers predictive of disease, pharmaceutical discoveries and better optical solutions to current refractive disorders.

OD 521 Ocular Diagnostics and Therapeutics II (3 credits)

Students continue development of their knowledge and skills in advanced refractive and medical ophthalmic evaluation and management. The course will continue to use a case-based and problem-solving methodology in the synthesis and evaluation of optometric data and management of refractive problems and ocular disease.

OD 522 Family Practice/ Primary Care II (3 credits)

Using a case-based approach, problems will be presented to students that demand an integration of various ethical, social, legal and psychological considerations in addition to diagnostic and therapeutic challenges. Students will be expected to actively participate in discussions and resolution of the issues. While the students are expected to do the necessary research and consultation to conclude with final recommendations, they will be supervised and directed by a faculty mentor. Student presentations and reports should include documentation that supports their conclusions. These will be used in the final assessment of their students learning.

OD 523 Medical Optics II (2.5 credits)

This course emphasizes the medical optics in ophthalmic patient care. Higher order aberrations and pupillary effects are discussed as well as the optical principles of correcting the refractive error by spectacles, contact lenses and ophthalmic surgery. The optics of clinical instruments is presented. Laboratory experiences will complement lecture by demonstration of optical principles in ophthalmic instruments.

OD 527 Medical Anatomy II (2.5 credits)

This course is a detailed study of the gross ocular anatomy of the human eye, adnexa, and surrounding tissues supporting the structure and function of the visual system. It will investigate the histology and clinical micro- structure of the eye as well as embryological integration to the normal and abnormal development of ocular anatomy. There will also be an introduction to a clinical approach to the assessment and management of ocular anatomical disorders.

OD 525 Medical Biochemistry (2.5 credits)

This course is a continuation of the previous course in the principles of biochemistry and genetics. Diseases will be discussed from genetic, metabolic and/or nutritional viewpoints and compared with normal biochemical processes. The course will explain pathologies at the molecular level and will emphasize certain biochemical principles related to the eye. It will provide the student with the level of contemporary knowledge base that will lead to an understanding of the etiologies and implications of metabolic and inherited conditions with ocular and visual implications.

OD 526 Medical Microbiology / Immunology I (2.5 credits)

This course is designed to provide the student with an understanding of the association of the immune response with protection against disease, its use in diagnosis and therapy, and the effects of the immunodeficiency and pathogenic conditions that result from abnormalities in the immune system. In addition, the course is designed to provide the student with a basis for understanding the relationship between host defenses, the clinically significant microorganisms, their transmission, pathogenic mechanisms, and association with infectious diseases in humans.

OD 611 Ocular Diagnostics and Therapeutics III (3.5 credits)

Students continue the development of advanced patient assessment and management skills. Summative practice evaluations prepare students for patient care experiences that will qualify them for internship in the clinical course. Students also learn to acquire ophthalmic images using specialized imaging technologies.

OD 612 Family Practice/ Primary Care III (3 credits)

Clinical cases involving multidisciplinary involvement will be presented. Participation will include discussion by physicians, nurses, pharmacists, social workers, public health personnel and other professional personnel as well as optometrists to exemplify and provide proper sequential and/or parallel management and arrive at an integrated approach in solving the patient's issues.

OD 613 Medical Optics III (2.5 credits)

This course covers the ophthalmic materials, and optical characteristics of ophthalmic lenses prescribed in the correction of refractive errors. It includes discussion of materials, fabrication, lens design, verification and other procedures associated with dispensing, including frame selection and quality control issues.

OD 614 Medical Anatomy III (3 credits)

The regional study of the head and neck continues in this course. A careful study of the osteology, musculature, connective, nervous, circulatory and lymphatic systems are covered. There will be an emphasis on clinical correlates, especially as it relates to the eye and vestibular systems. Special attention is given to ensure the connection between anatomy and physiology is explained, and that basic principles of pathology are introduced via radiographic images.

OD 615 Visual Perception (2 credits)

This course presents the science of monocular sensory vision emphasizing the anatomy and visual physiology of the retinal photoreceptor layer and post-retinal neurology. Emphasis is placed on understanding the duplex nature of cone vs rod vision, spatial and temporal aspects of visual perception and includes a discussion of the biophysics of light stimulation in vision. Clinical testing correlates of monocular vision and perception are covered.

OD 616 Medical Microbiology / Immunology II (2.5 credits)

This course is a continuation of the previous course in microbiology and immunology. The course is designed to provide the student with a basis for understanding the relationship between host defenses, the clinically significant microorganisms, their transmission, pathogenic mechanisms, and association with infectious diseases in humans and discuss its clinical relevance.

OD 621 Ocular Diagnostics and Therapeutics IV (3.5 credits)

This course introduces the use of contact lenses as a corrective modality in primary care optometric medicine. A clinically-based approach will include anatomical, physiological, refractive and lifestyle considerations in patient selection, material selection, lens manufacturing and design, and wearing schedule. Laboratory experience in fitting, verification, assessment, management and troubleshooting will prepare students for patient care experiences.

OD 622 Internal Medicine I (2 credits)

The purpose of this course is to train the student in the skills necessary to identify the signs of disease. The course covers the clinical procedures necessary to evaluate the general status of the body systems, especially those areas where the patient's history is suggestive of alterations from normal. The course will emphasize overall neurological evaluation and cardiovascular assessment including blood pressure measurement, EKG evaluation and auscultation of the carotid artery for the presence of bruits as well as other systemic evaluations. The course also identifies certain areas for which the optometric physician needs in depth knowledge to facilitate proper laboratory testing and imaging. The student will be expected to have previously completed or to complete Basic Life Support training at the Provider level.

OD 623 Medical Physiology I (3.5 credits)

This course is designed to expand student knowledge in medical physiology by linking anatomical elements with their normal functions. It facilitates the integration of the several disciplines through a pathophysiological approach that links with pathology, pharmacology and clinical medicine. There is an emphasis placed on the systems involving renal, cardiovascular, endocrine and hepatic functions.

OD 626 Biostatistics / Medical Research Methodology (2 credits)

This course covers development of a research hypothesis, experimental design, specific aims and statistical analysis. It will involve writing of research proposals, grant applications, and documents required for human subject and animal research. Training required for carrying out research and clinical trials will be discussed. Students will be better prepared for the presentation of papers and posters and for publication in peer-reviewed journals.

OD 628 Neuro-Ophthalmology I (3 credits)

The course presents the scientific basis underlying human vision by focusing on the principles of binocularity and stereopsis, related concepts and their application particularly when binocularity is abnormal. The course covers basic concepts such as the horopter,

fusion, retinal correspondence and others. It also covers the neurological pathways and systems involved in maintaining normal binocularity so as to lay down the foundation for an understanding of the clinical presentation and testing in the evaluation of normal and abnormal binocular conditions discussed in later courses. Topics of discussion include the neurology of eye movements including the innervation of the eye muscles and the control of version, vergence, and saccadic eye movements. Course emphasis will be placed upon understanding normal and abnormal eye movements, their assessment and management.

OD 629 Neuroanatomy (2.5 credits)

This course is designed to provide a broad understanding of the human central nervous system with an emphasis on functional and clinical neuroanatomy, the application of this knowledge to localize and diagnose neuropathology, and the ability to interpret diagnostic imaging of the brain and spinal cord. However, this course will also provide students with a foundation in the normal structure and function of the CNS at the molecular, cellular, and histological levels, and CNS development as a basis for understating CNS pathology and treatment. The course will begin with fundamental aspects of neuroscience (including gross neuroanatomy, neuro-histology, neurophysiology) and then examine regional neuroanatomy, functional systems, and clinical correlates starting with the peripheral nervous system and then progressively moving up the neuro-axis from the spinal cord to the cerebral cortex.

OD 632 Internal Medicine II (2 credits)

This course covers the major systemic diseases that have ocular and visual implications and reviews their etiology as discussed in pathology, the patient's signs and symptoms and other clinical assessments to not only reach a definitive diagnosis but also develop effective management plans. Since many systemic diseases have ocular correlates or implications, management often takes the form of co-management. The course will emphasize certain diseases such as diabetes, cardiovascular disorders, infectious and other conditions prevalent in the general patient population. Students will complete Advanced Life Support training and certification as part of this course.

OD 633 Medical Physiology II (4 credits)

This course continues the discussion of the medical physiology that was introduced in OD 613. The homeostatic status and changes of these molecules are discussed in consideration of the changes brought about by aging. There is a discussion of the production of free radicals including oxygen free radicals and the quenching of some of these radicals by various vitamins. The course emphasizes the physiology and biochemistry of ocular tissues such as the sclera, choroid, aqueous, the vitreous, the lens and the cornea.

OD 635 Pharmacology I (3.5 credits)

This course begins with the principles underlying pharmacokinetics, pharmacodynamics and therapeutics. It discusses routes of administration, dosages and associated nomenclature. The course then uses a survey approach to various classes of systemic medications, their cellular mechanisms, actions and indications. There is also a discussion

of individual drug selection and administration based on the individual's genetic profile in order to select the best medication for the individual patient.

OD 636 Gerontology and Low Vision (2.5 credits)

This course addresses the etiology and epidemiology of vision impairment and associated diseases, the assessment and examination of the low vision patient including necessary modifications to the testing procedures and the prescribing of optical and non-optical devices. It covers orientation and mobility issues, patient counseling and locally-based services available to support the patients. Geriatric topics will also be included. Students participate in medical internship training at nursing homes and assisted living facilities as part of this course.

OD 637 Integrated Clinical Practice (1.5 credit)

This course covers the core clinical skills necessary to integrate into direct patient care as identified by National Board of Optometric Examiners rubrics. In addition to providing an opportunity to reinforce areas of proficiency and identify potential areas of weakness after passing the Objective Structured Clinical Examination (OSCE), this course will provide exercises dedicated to the rubric of the Part III of the National Board, specifically critical thinking and decision making. Both are necessary elements to preparing students to be successful once they enter direct patient care.

OD 638 Ocular Diagnostics and Therapeutics V (3 credits)

This course builds upon the knowledge presented in previous courses. Fitting strategies utilizing advanced technology for specialized contact lens design including presbyopia, anterior segment anomalies, therapeutic lenses, post-surgical and post-trauma patients, corneal refractive therapy as well as contact lenses for the geriatric and pediatric populations will be presented. Case examples will be used to encourage independent decision making for complicated problems in contact lens fitting. Laboratory experience in fitting, verification, assessment, management and troubleshooting will prepare students for patient care experiences.

OD 712 Principal Clinical Experience I (4 credits)

This course serves as an introduction to clinical patient care and clinical operations. It consists of active involvement in direct patient care. The students will conduct testing for patients and will refine their clinical procedures and examination techniques/sequencing including refraction. Emphasis is placed on professional and proper doctor- patient communication and inter-professional communication within a clinic/hospital setting. Students will begin integrating their clinical training into critical thinking skills that should result in appropriate diagnoses and management of the patient.

OD 713 Medical Pathology I (4 credits)

This course covers the causes and underlying mechanisms of diseases. It addresses basic pathological processes associated with cell injury, cell death, acute and chronic inflammation, tissue repair and regeneration, healing, fibrosis and neoplasia. It includes a discussion of the pathology associated with various body systems with specific attention

paid to those pathological changes involving ocular manifestations of systemic disease, particularly those most common in the population.

OD 715 Pharmacology II **(3.5 credits)**

This course continues the presentation of pharmaceutical management of systemic conditions in various organ systems. Ocular manifestation of systemic diseases and therapeutic co-management are taught. It includes discussions of topical, oral, and injectable medications, autonomic drugs, anesthetics, lubricants, and various diagnostic and therapeutic medications. Emphasis is placed on the pharmacokinetics, pharmacodynamics, cellular interactions, indications and contra-indications, dosages and ocular and systemic toxicity of drugs used in the management of ocular conditions and associated systemic disease.

OD 716 Surgery I **(2.5 credits)**

This course presents expanded therapeutic laser procedures, including: discussions of laser physics and tissue interaction, laser hazards and safety, and clinical laser treatments for open angle glaucoma, narrow angle glaucoma, and pseudophakic capsular opacities as well as the practice management aspects of outpatient laser and refractive surgery. This course includes the evaluation and management, such as the surgical decision-making in the care of patients, for cataract surgery. All pre-surgical testing, counselling, and preparation for the patients are presented as are postoperative medical management protocols.

OD 718 Neuro-Ophthalmology II **(2.5 credits)**

This course discusses the diagnosis and management of strabismus and amblyopia, their etiologies, risk factors, classification and the interventional strategies including optical management, surgery and oculomotor rehabilitation in the contemporary practice of optometric medicine. Congenital or acquired disorders such as nystagmus, saccadic eye movements and higher order vision information processing conditions are covered. Prognoses and expected outcomes are discussed.

OD 720 Pediatrics **(2.5 credits)**

This course concerns the diagnosis and management of the major refractive, binocular and ocular disorders and well as the systemic diseases commonly occurring in the pediatric population especially those where there is an ocular component. There is also a discussion of normal growth and development markers and expectations in this population. Various testing alternatives and strategies for the management of the visual conditions in children are discussed. Students participate in medical internship screenings of school age children as part of this course.

OD 721 Clinical and Board Review **(3 credits)**

This course is a guided review of previous coursework with an emphasis on preparation for taking the National Boards. Topics will include those required by the National Board of Examiners in Optometry.

OD 722 Principal Clinical Experience II (4 credits)

Students continue in the clinic as active participants in primary patient care. Students receive the patient information gathered by the technicians and advanced technology which the clinician will use for diagnosis and management. Students will continue to develop their critical thinking skills. They will also order appropriate testing and/or conduct specialized imaging procedures as part of the patient care team. Increased independence and higher expectations for the students will be applied in their clinical assessments.

OD 723 Medical Pathology II (4 credits)

This course covers the diagnosis and management of the diseases of the anterior segment, including those resulting from systemic disease. This course emphasizes those conditions affecting the ocular adnexa, conjunctiva, cornea, anterior chamber, iris, and crystalline lens. It addresses the etiology, diagnosis and management of infectious, autoimmune, neuromuscular, degenerative and neoplastic conditions as well as those involving surgical and laser interventions. Assessment techniques, specific to the anterior segment will be discussed as well as laboratory testing and detailed management protocols.

OD 728 Glaucoma (2.5 credits)

This course is dedicated to the diagnosis, treatment, and management of glaucoma. It will discuss the epidemiology of glaucoma and other co-morbidities that contribute to risk factors. Reinforcement of optic nerve anatomy and histology will accompany a review of optic nerve pathology as it relates to this disease process. Topics will include: understanding the proper tests and follow up protocols depending on observed risk factors; Initiation of treatment and the various treatment options to eye care physicians; Understanding when to treat and which treatment option to choose based on risk factors and contraindications; Understanding how to recognize and/or anticipate disease progression and when to refer for secondary/tertiary care (based on state licensing).

OD 729 Medical Leadership and Practice Management I (1.5 credits)

This course will discuss issues of professional and medical ethics, legal requirements and ethical decision making. The concepts of leadership theory are presented in the context of professional responsibilities. The changing landscape of leadership from patient care to family to community is described in detail. Practice Management concepts and strategies will be introduced. The development of personal leadership styles will be introduced. This course will also address service, professionalism, communication, and personal development. Topics include service as a valued entity in the optometric profession both locally and nationally. The various dimensions of professionalism in the healthcare professions are discussed including personal beliefs, decision making and non-discrimination.

OD 732 Principal Clinic Experience III (4 credits)

This course is designed to prepare the student for externships. Students are expected to display increased efficiency and timely adherence to a clinical schedule. Critical thinking skills and appropriate diagnosis and patient management should continue to be

demonstrated by the student. At this point, students should consult with their mentors with confidence, displaying high standards of independence and excellence in their clinical assessments and should demonstrate knowledge and self-awareness in cases where referrals or consultations are warranted.

OD 733 Medical Pathology III (2.5 credits)

This course focuses on the diagnosis and treatment of disorders involving the posterior segment of the eye, including those resulting from systemic diseases. The anatomical, physiological, histological and pathological processes which occur during ocular disease will be presented. Emphasis will be placed on the medical management of conditions involving the vitreous, retina, and uveal tract as well as posterior segment pathology associated with systemic diseases. This course contains a comprehensive presentation of primary and secondary glaucoma, including etiology, mechanisms, prevalence and classification. The course emphasizes diagnostic testing and imaging utilizing advanced technologies, procedures, photographic techniques and management options including medical, surgical and laser procedures.

OD 734 Neuro-Ophthalmology III (2.5 credits)

This course provides an in-depth discussion of the diagnosis and management strategies for various neurological disorders that also affect vision. Other systemic conditions such as some vascular or cardiac etiologies or space- occupying lesions of the brain may also contribute to visual abnormalities or loss. Testing and neurological evaluation is discussed in depth and is accompanied by various radiological and other technologies that help the diagnostic process. The diagnostic strategies for the confirmation of acquired brain injuries are also covered in detail.

OD 735 Surgery II (2.5 credits)

This course discusses expanded therapeutic procedures starting with an introduction to ophthalmic surgical procedures. It then introduces OSHA guidelines and asepsis, suture and suturing techniques, entropion repair, chalazion management, postoperative wound care and radiofrequency surgery. Injections are covered starting with local injection sites, venipuncture, local anesthesia, emergency surgical procedures anaphylaxis and other emergencies. This course presents the evaluation and management, including surgical decision-making in the care of oculoplastic procedures candidates. All pre-surgical testing, counselling and preparation of the patients are presented as are the post-operative medical management protocols.

OD 737 Radiology (1 credits)

This course introduces the student to the medical specialty of radiology and provides a fundamental understanding of the field of radiology, including ordering and interpretation of medical imaging.

OD 738 Medical Leadership and Practice Management II (1.5 credits)

This course provides skills to step into and succeed in leadership positions and acquire skills needed to excel as heads of departments, divisions, projects, and institutions at large.

Topics discussed are medical and practice management, including communication, mentoring, process and quality improvement, financial planning, and medical research. Participants will learn about the medical legislative process and the evolution in scope of practice in medicine.

OD 739 Public Health / Epidemiology (2 credits)

This course provides instruction regarding the promotion and improvement of public health through organized efforts of interdisciplinary teams that improve the quality of life by prevention of diseases in a community. It will place particular emphasis on eye diseases and/or conditions among high-risk and vulnerable populations. It discusses effects of disease on the health and well-being of society and provides instruction into the benefits of health screenings and standards of care. The course reviews major epidemiological eye studies together with those determinants that contribute to ocular diseases and conditions in aging and poverty. Other topics include those factors that contribute to or worsen the effect of visual impairment such as pharmacological factors or cognitive impairment in the aging population or psychological factors in the young. There will also be in-depth discussions of health care policies.

OD 811 Advanced Clinical Experience I (16.5 credits)

The fourth-year rotations occur within the clinical network affiliated with the College of Optometric Medicine and include direct supervised patients care in the Primary Eye Care clinics with rotations to appropriate clinical facilities for direct and observed supervised clinical experience in specialty eye diseases, contact lenses, pediatrics, low vision, ophthalmic dispensing services as well as participation in other medical specialty clinics. Clinical management by interns during the 4th year is expected to reflect an ability to evaluate and manage a complex caseload including surgical care.

OD 812 Emergency Medicine (1 credits)

This course introduces the student to the medical specialty of emergency medicine and provides a fundamental understanding of the common diagnoses and treatments within emergency medicine.

OD 821 Advanced Clinical Experience II (16.5 credits)

The fourth-year rotations occur within the clinical network affiliated with the College of Optometric Medicine and include direct supervised patients care in the Primary Eye Care clinics with rotations to appropriate clinical facilities for direct and observed supervised clinical experience in specialty eye diseases, contact lenses, pediatrics, low vision, ophthalmic dispensing services as well as participation in other medical specialty clinics. Clinical management by interns during the 4th year is expected to reflect an ability to evaluate and manage a complex caseload including surgical care.

OD 822 Otolaryngology / EENT (1 credits)

This course introduces the student to the medical specialty of otolaryngology and provides a fundamental understanding of the common diagnoses and treatments within otolaryngology with an emphasis on disorders affecting the ears and sinuses.

OD 831 Advanced Clinical Experience III (16.5 credits)

The fourth-year rotations occur within the clinical network affiliated with the College of Optometric Medicine and include direct supervised patients care in the Primary Eye Care clinics with rotations to appropriate clinical facilities for direct and observed supervised clinical experience in specialty eye diseases, contact lenses, pediatrics, low vision, ophthalmic dispensing services as well as participation in other medical specialty clinics. Clinical management by interns during the 4th year is expected to reflect an ability to evaluate and manage a complex caseload including surgical care.

OD 832 Psychiatry (1 credits)

This course introduces the student to the medical specialty of psychiatry and provides a fundamental understanding of the common diagnoses and treatments within psychiatry and the effects of mental and behavioral health on overall patient care.

Elective Courses

OD 790 Integrated Clinical Practice II (4 credits)

This 4.0 credit course is designed to prepare and supplement the student clinical experiences for externships through the Affiliated Clinics of the College of Optometric Medicine. Students are expected to display increased efficiency and timely adherence to a clinical schedule. Critical thinking skills and appropriate diagnosis and patient management should continue to be demonstrated by the student. At this point, students should consult with their mentors with confidence, displaying high standards of independence and excellence in their clinical assessments and should demonstrate knowledge and self-awareness in cases where referrals or consultations are warranted.

OD 791 Advanced Integrated Clinical Practice II (1.5 credits)

This course is a supplement to Integrated Clinical Experience II. Additional 1.5 credit provides the student with additional experiences to include practice management, optical management, and rotations through the on-site Eye Institute's specialty clinics (Low Vision, TBI, Pediatrics, Specialty Contact Lens, and Ocular Disease). Case presentations, evidence-based research on clinical conditions, and ongoing enhancement of examination skill proficiency as assigned by externship site instructors, constitutes an important component of this clinical experience.

OD 792 Integrated Clinical Practice III (4 credits)

This 4.0 credit course is designed to prepare and supplement the student clinical experiences for externships through the Affiliated Clinics of the College of Optometric Medicine. Students are expected to display increased efficiency and timely adherence to a clinical schedule. Critical thinking skills and appropriate diagnosis and patient management should continue to be demonstrated by the student. At this point, students should consult with their mentors with confidence, displaying high standards of independence and excellence in their clinical assessments and should demonstrate knowledge and self-awareness in cases where referrals or consultations are warranted.

OD 794 Advanced Integrated Clinical Practice III (1.5 credits)

This course is a supplement to Integrated Clinical Experience II. Additional 1.5 credit provides the student with additional experiences to include practice management, optical management, and rotations through the on-site Eye Institute's specialty clinics (Low Vision, TBI, Pediatrics, Specialty Contact Lens, and Ocular Disease). Case presentations, evidence-based research on clinical conditions, and ongoing enhancement of examination skill proficiency as assigned by externship site instructors, constitutes an important component of this clinical experience.

OD 795 Integrated Clinical Practice IV (4 credits)

This 4.0 credit course is designed to prepare and supplement the student clinical experiences for externships through the Affiliated Clinics of the College of Optometric Medicine. Students are expected to display increased efficiency and timely adherence to a clinical schedule. Critical thinking skills and appropriate diagnosis and patient management should continue to be demonstrated by the student. At this point, students should consult with their mentors with confidence, displaying high standards of independence and excellence in their clinical assessments and should demonstrate knowledge and self-awareness in cases where referrals or consultations are warranted.

OD 794 Advanced Integrated Clinical Practice IV (1.5 credits)

This course is a supplement to Integrated Clinical Experience II. Additional 1.5 credit provides the student with additional experiences to include practice management, optical management, and rotations through the on-site Eye Institute's specialty clinics (Low Vision, TBI, Pediatrics, Specialty Contact Lens, and Ocular Disease). Case presentations, evidence-based research on clinical conditions, and ongoing enhancement of examination skill proficiency as assigned by externship site instructors, constitutes an important component of this clinical experience.

SL 630 Service-Learning Experience I (1 credit)

The purpose of this elective University course is to incorporate clinical, community and humanitarian service into academic learning by exposing optometry students from Rocky Mountain University of Health Professions to the scope of health issues and eyecare needs of individuals who are underserved with limited accessibility in a developing country/region, such as Africa.

SL 631 Service-Learning Experience II (1 credit)

The purpose of this elective University course is to incorporate clinical, community and humanitarian service into academic learning by exposing optometry students from Rocky Mountain University of Health Professions to the scope of health issues and eyecare needs of individuals who are underserved with limited accessibility in a developing country/region, such as Thailand.