

**SUNY College of Optometry  
Elective Course Descriptions**

**Credits: 1**

**Grade Scale: honors/pass/fail**

**Nutrition Counseling in an Optometric PractiClinEd**

Course Code: ELC-510      Instructor: Dr. Rapp

Department: ClinEd

Maximum Enrollment: 12

This course is designed for students who are contemplating including some components of nutritional education and/or counseling as part of their clinical practiClinEd (either doing it themselves or hiring someone or some combination). It is predicated upon the material presented on general nutrition in Human BiosciencClinEd II and on ocular nutrition in Ocular Anatomy, Biochemistry and Physiology II.

**Introduction to Sports Vision – Theory and Assessment**

Course Code: ELC-511      Instructor: Daniel M. Laby, MD

Department: ClinEd

Maximum Enrollment: 10

Sports vision begins with a normally functioning visual system, and searches for ways to provide enhanced visual function as is required by athletes for optimal sports performance. This course will introduce the student to this new approach and review ways to both evaluate an athlete as well as ways to provide targeted enhanced visual function according to published norms, and the visual requirements, of a particular sport.

**Concussion and Mild Traumatic Brain Injury: Inter-professional Evaluation and Management**

Course Code: ELC-512      Instructor(s): Neera Kapoor, OD, MS (plus invited lecturers: Bryan Hujak, DPT; Jason Krellman, PhD; Laura BalClinEdr, MD; Allen Cohen, OD)

Department: BVS

Maximum Enrollment: 20

This is an interactive course designed for students interested in learning about the inter-professional management involved in those with concussion/mild traumatic brain injury. It includes lectures and required readings from professionals in the areas of neuro-optometry, vestibular rehabilitation, neuropsychology, and neurology/neuro-ophthalmology. This course will provide an awareness and foundation that prepares a student to be a rehabilitation extern in the senior year of optometry school and/or incorporate this knowledge into private practiClinEd upon graduation.

**Personal Financial Planning for the New Optometrist**

Course Code: ELC-515      Instructor: Steven H. Schwartz, OD, PhD

Department: ClinEd

Maximum Enrollment: 10

This course will provide students with the background to make prudent financial decisions. Students will learn fundamental elements of personal financial planning with an emphasis on those of most importance to the new optometry graduate. Topics include basic financial principles, investments, taxes, insurance, real estate, mortgages, retirement and savings strategies. This is not a course on practiClinEd management.

**New Issues in Glaucoma**

Course Code: ELC-520      Instructor: Dr. Fingeret

Department: ClinEd

Maximum Enrollment: 20

The course will provide new information on treatments for glaucoma reviewing new technology, reClinEdnt clinical trials, medications and philosophies and how they impact glaucoma care.

### **Laser Applications in Ophthalmology**

Course Code: ELC-521      Instructor: Dr. Polistina

Department: ClinEd

Maximum Enrollment: 10

The purpose of this elective course is to introduClinEd the third year student to LASER technology and its applications in eye care. At the conclusion of the course the student should have a familiarity with LASER technology and development, LASER safety, LASERs most commonly used in ophthalmology, and clinical applications. Case studies will be reviewed emphasizing patient selection, pre and post-operative management and outcome. Students will work independently to collect case study material. Case studies will be presented at each classroom session. The course grade will be based on a written exam and clinical presentations.

### **Clinical Decision Making in Low Vision**

Course Code: ELC-522      Instructor: Dr. Marinoff

Department: ClinEd

Maximum Enrollment: 10

This elective course will prepare interns to make clinical decisions in the evaluation and management of low vision patients. Each week cases will be reviewed in an interactive manner that highlights exam modifications needed to evaluate each patient, the low vision deviClinEd selection proClinEdss for each case, and deviClinEd recommendations and rehabilitation strategies that were used in the management plan. The course will take plaClinEd on the Vision Rehabilitation clinic floor which will allow for demonstration of examination equipment and for students to have hands-on trial of the recommended deviClinEds.

### **Visual Field Techniques and Applications for Glaucoma**

Course Code: ELC-525      Instructor: Dr. Suresh Viswanathan

Department: BVS

Maximum enrollment: 12

This course is intended to expose students to current and emerging visual field assessment techniques in glaucoma patients. The course will provide the physiological and psychophysical basis of different visual field testing strategies, testing methods, data presentation, and interpretation of results. The visual field strategies covered in the course include manual kinetic perimetry, standard automated static perimetry, microperimetry, short wavelength perimetry (SWAP), frequency doubling technology (FDT) perimetry, contrast sensitivity perimetry, edge perimetry, multifocal electroretinogram and multifocal visually evoked potentials. The course will also discuss the correlation of visual field changes to structural changes in glaucoma and the application of the combined information for understanding glaucoma progression.

### **The ScienClinEd of Acupuncture**

Course Code: ELC-530      Instructors: Drs. Soroka & Wai

Department: ClinEd

Maximum Enrollment: 16

This course will give an overview of the history of acupuncture in China and the foundation of Oriental medicine theory. Students will learn the underlying principles of Chinese medicine and how it differs from Western medicine. The course will survey current research studies of acupuncture treatment for Amblyopia, Dry eye, Sjogren's syndrome and glaucoma cases.

### **Applying Current Publications in the Fitting of Specialty Contact Lens**

Course Code: ELC-541      Instructor: Dr. Gundel      Department: BVS

Maximum Enrollment: 8

This elective is intended to help students learn to apply the findings of recently published articles, both peer reviewed and non-peer reviewed, to the clinical care of specialty contact lens patients. Working as a pair clinically, students will be scheduled to see four patients within a three hour block of time per week in the Contact Lens Specialty Service.

### **Vision and Learning Intensive**

Course Code: ELC-542      Instructors: Drs. Steiner & Ritter      Department: BVS

Maximum Enrollment: 20

This course is designed to clarify the link between visual input skills and visual perceptual skills. Students will understand standard and advanced perceptual testing for adults and children and will become familiar with the types of academic accommodations that optometrists can recommend. Students will understand the processes and components of a thorough psychoeducational evaluation and be able to interpret such tests as might be provided by parents. Students will learn how to address various visual perceptual deficiencies through vision therapy.

### **Advanced Topics for GP Contact Lenses**

Course Code: ELC-543      Instructor: John Gialousakis, OD      Department: BVS

Maximum Enrollment: 8

This course will enhance basic corneal topography and gas permeable (GP) contact lens principles with advanced topics, such as: simulated fluorescein patterns, toric and multifocal corneal GPs, scleral contact lenses with toric and multifocal options, and standard vs. dual-axis orthokeratology (ortho-K).

### **The Visual Perception of Location and Motion During Eye Movements**

Course Code: ELC-545      Instructor: Dr. Pola      Department: BVS

Maximum enrollment: 12

An appreciation of the psychophysics of perceived location and motion when eye movements occur and how overall stimulus circumstances influence perceived location during a saccade. Also, the neural mechanisms and signals that, during eye movement, contribute to perceived location and movement and oculomotor plasticity and perceived location.

### **Seminar in Health Policy and Analysis**

Course Code: ELC-550      Instructor: Dr. Soroka      Department: ClinEd

Maximum Enrollment: 20

This course is intended to provide students with an in-depth knowledge of several topical issues in health care. These issues will be discussed and analyzed using readings that will be discussed in class. The aim is to give a new understanding and appreciation of the many ways in which health care delivery is influenced by the policies of health care. This course will enable students to understand the contemporary health policy debates by providing a political and economic framework of the health care institutions, organizations and markets. The course is designed to give students the frameworks, analytic tools, and informational resources in health services and health policy. This broader background will prepare students for professional work in the health sector as clinicians in medical and



Many clinical conditions can impair patients' abilities to visually perceive the spatial layout of their environment and to safely carry out visually-guided spatial-motor activities. Research into such impairments and their remediation has been increasing in recent years, due in part to increasing technical capabilities to conduct such research and in part to increasing understanding of the deep links between perception and action. This seminar aims at a close reading and critical examination of some recent research in this area.

### **Myopia: Etiology and Potential Treatments**

Course Code: ELC-585      Instructors: Drs. Benvaente, Schulman & Troilo      Department: ClinEd  
Maximum Enrollment: 12

This course will evaluate theories of myopia development and the evidence for emerging treatments to control myopia progression. The actual scientific studies will be evaluated and clinical case-studies will be discussed. Applications to clinical practice will be emphasized.

### **Higher Order Aberrations, Accommodation & Refractive Error Development**

Course Code: ELC-595      Instructor: Dr. Kruger      Department: BVS  
Maximum Enrollment: 12

The seminar complements the Integrated Optics sequence of courses with original readings and discussion. The course examines the role of natural "aberrations" from the environment (optical vergence) and from refraction and chromatic dispersion across the extended pupil of the chambered vertebrate eye, especially the role of defocus, higher order aberrations and chromatic aberration. We consider the hypothesis that defocus, higher order aberrations and chromatic aberration specify ocular focus, optical vergence, distance and relative depth, as polychromatic blur across the retina in conjunction with polychromatic modulation across the exit pupil of the eye, and that modulation/phase across both retina and pupil are potential signals for accommodation, emmetropization and visual perception. Readings explore the nature and quality of the retinal image; blur from diffraction, defocus and higher-order aberrations, the Stiles-Crawford effect, and sensitivity of the visual system to wavefront aberration especially the wavefront's spherical curvature (optical vergence).