

**Course Code and Name: OPTO 314
Clinical Examination of the Visual System II**

Units: 1 + 2 = 3 credits

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Recommended textbooks:

1. **Clinical Procedures in Optometry - J. Boyd Eskridge, John F. Amos, Jimmy D. Bartlett.**
2. **Primary care optometry- Theodore Grosvenor, Theodore P. Grosvenor.**

Topics of the course in details:

Week	Topic in details	Notes
1	<p style="text-align: center;">Direct ophthalmoscope I</p> <ul style="list-style-type: none"> • Uses of ophthalmoscope and how does it work? • Clinical uses. • Components and accessories of ophthalmoscope. 	
2	<p style="text-align: center;">Direct ophthalmoscope II</p> <ul style="list-style-type: none"> • Anatomical and pathological aspects in ophthalmoscopy. • Evaluation of fundus (observing and recording). • Commercially available instrument. 	
3	<p style="text-align: center;">Indirect ophthalmoscope</p> <p style="text-align: center;"><i>Same as direct ophthalmoscope, in addition to:</i></p> <ul style="list-style-type: none"> • Condensing lens (design, function and how to use). • Monocular indirect ophthalmoscope. • Binocular ophthalmoscope 	
4	<p style="text-align: center;">Slit-lamp biomicroscope examination of the anterior segment I</p> <ul style="list-style-type: none"> • Review of anterior segment anatomy • Design and parts of Slit lamp biomicroscope. • Components and accessories of Slit lamp biomicroscope. 	
5	<p style="text-align: center;">Slit-lamp biomicroscope examination of the anterior segment II</p> <ul style="list-style-type: none"> • Clinical use of slit lamp biomicroscope. • Methods of illumination (Techniques and types). • Clinical procedure 	
6	<p>Revision and tutorial</p>	
7	<p>Mid Term Exam 2</p>	
8	<p style="text-align: center;">Monocular subjective refraction</p> <ul style="list-style-type: none"> • Review of types of refractive error. • What is subjective refraction? • Instrumentation for subjective refraction. • Methods and techniques used to correct near and distance refractive error (spherical and cylindrical refractive error). 	

9	<p>Binocular subjective refraction</p> <ul style="list-style-type: none"> • Instrumentation for Binocular subjective refraction. • Binocular methods and techniques used to correct near and distance refractive error (spherical and cylindrical refractive error). 	
10	<p>Stereopsis</p> <ul style="list-style-type: none"> • Retinal disparity and Panum's area • What is stereopsis and Stereo-Fusion • Importance of assessing stereopic function. <p>Clinical assessment of stereopsis (Titmus Fly test, The Frisby test, Random dot test)</p>	
11	<p>Mid Term Exam 2</p>	
12	<p>Contrast sensitivity</p> <ul style="list-style-type: none"> • Definition. • Visual acuity vs. Contrast sensitivity. • Factors affecting contrast sensitivity. • Grating tests of contrast sensitivity. • Clinical contrast sensitivity tests (The Arden plate test, The Vistech chart, The Melbourne Edge test) 	
13	<p>Color vision</p> <ul style="list-style-type: none"> • What is color vision • Trichromatic theory of color vision. • Normal color vision curve. • Classification of color vision defects. • Assessment of color vision using Pseudoisochromatic (PIC) Plates (Ishihara plates tests) and hue discrimination tests (D15, Farnsworth-Munsell 100 hue test). 	
14	<p>Revision and tutorial</p>	
15	<p>Final exam</p>	

Course Assessment methods

Task/ Exam	Marks %
1ST Mid-Term Theoretical Exam	15
1st Mid-Term Practical Exam	7.5
2nd Mid-Term Theoretical Exam	15
2nd Mid-term practical Exam	7.5
Final practical Exam	15
Final Exam	40
Total	100

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