College of Optometry

WESTERN UNIVERSITY · OF HEALTH SCIENCES · Educare Sanare Conjunctim

The discipline of learning. The art of caring.

Course Summary

Computer Vision Care

COPE #38036-GO

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Course Description

It's not enough to ask if patients work on a computer because who doesn't these days? This course presents an overview of computer-related vision problems presenting in the optometric practice and provides a team approach in developing appropriate treatment and management plans for your patients. Lens design, ergonomics and prescribing considerations as well as case examples are included in this interactive session.

Disclosures

- As a paid speaker I have not been sponsored by any companies mentioned in this lecture

- I am not a consultant to nor an employee of any ophthalmic company.

Course Learning Objectives

1. Understand the cause and prevalence of computer related visual fatigue.

2. Become familiar with occupational lens designs.

3. Develop a treatment and care plan for this patient population.

Course Outline

1. Computer Vision Syndrome
    a. Definition
    b. Incidence
    c. Relevant studies
    d. Clinical Picture
        i. Visual symptoms

ii. Diagnostic difficulties

    e. Optometric Exam - Pre-exam Questionnaire & History
    f. Dry Eye Syndrome - Eye Blinking during VDT Use
    g. Causes of Visual Symptoms - Anterior Segment Dry Eye Evaluation
    h. Plus at Near
    i. Computer Glasses
    j. Accommodative Response
    k. Nearpoint tests
        i. Nilsen and Salibello Study
        ii. Prio Computer Vision Testing
        iii. Kolker, Hutchinson and Nilsen Study - Presbyopes
        iv. Accommodative response to PRIO versus Printed Text

2. Workstation Ergonomics
    a. Causes of Visual Symptoms
    b. Vision Correction and Design
    c. Single Vision Intermediate Lenses
    d. Bifocal (Intermediate/Near)

3. What About the Pre-Presbyopes?

4. Lens Design and Prescribing
    a. Shamir Relax an d Essilor Anti-FAtigue
    b. General Purpose PAL
    c. Typical Computer Lens Fitting
    d. Frame Selection Guidelines
    e. Typical Computer Design
    f. Variable Focus Lenses
    g. Lenses that Utilize Power Regression

5. Case Study

6. Other Tests Indicated?

7. More Information on CVS