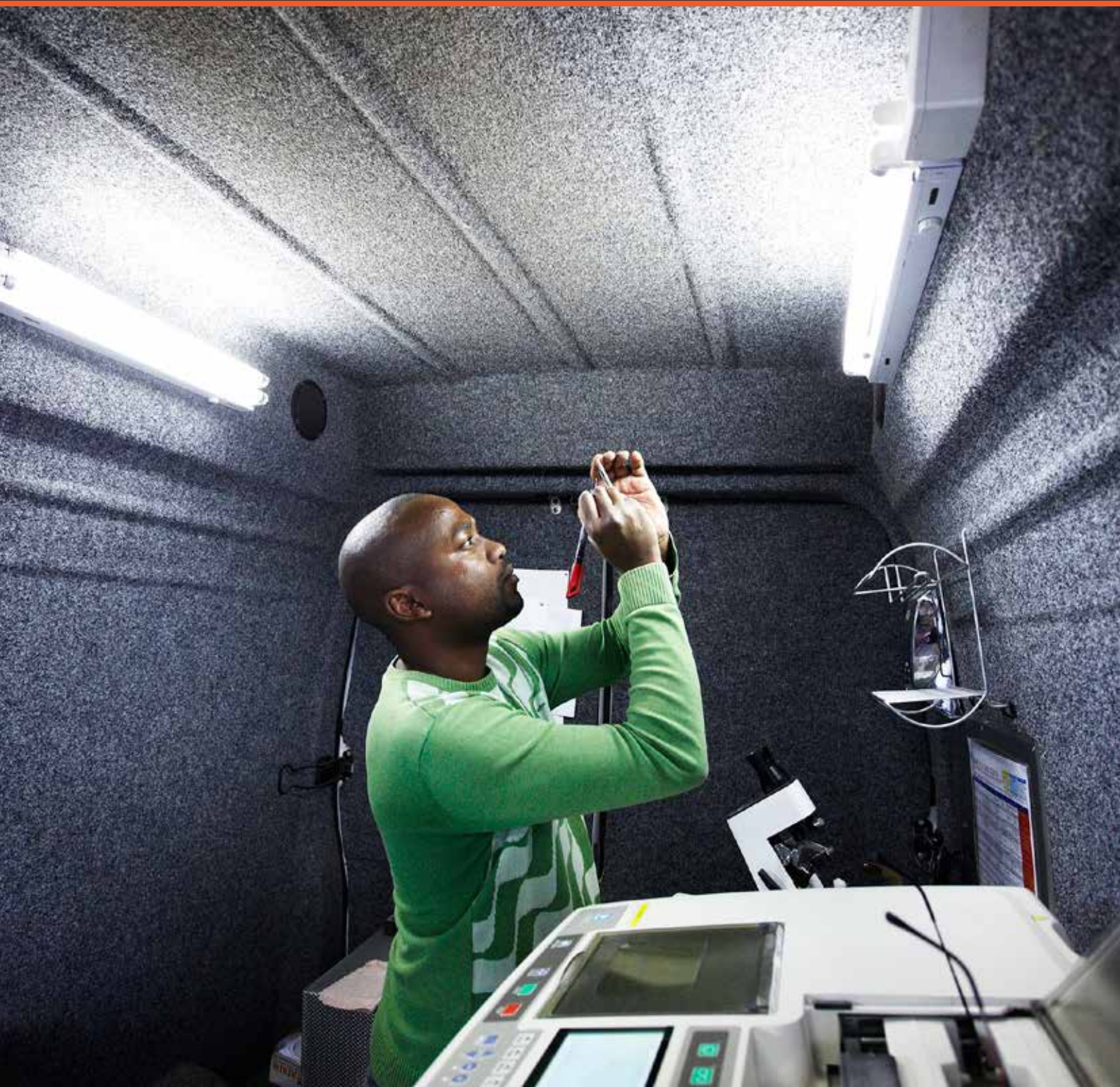
Brien Holden VISION INSTITUTE ACADEMY

Global Optometry Resources

# Occupational and Environmental Optometry



# OCCUPATIONAL AND ENVIRONMENTAL OPTOMETRY
## STUDENT MANUAL


## AUTHOR

**B. Ralph Chou:** University of Waterloo, Ontario, Canada

## CONTRIBUTING AUTHOR

No additional contributing authors

## PEER REVIEWER

**Rachel North:** Cardiff University, Cardiff, United Kingdom

## EDITORS AND GRAPHICS

**Brien Holden Vision Institute Staff –** Public Health Division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# COURSE OUTLINE

## COURSE AIM

This module aims at providing the student with the theory of the measurement of light and the application of these measurements for comfort and safety.

## COURSE OBJECTIVES

By the end of the module the student should be able to provide counsel on preventative occupational measures, diagnose and manage occupationally induced ocular conditions.

On successful completion of this course the learner should be able to:

- Describe measurements of light
- Generate an occupational history on patients
- Explain the diagnosis and management of occupationally induced conditions
- Assess occupational vision demands
- Provide appropriate treatments for inadequate occupational visual demands
- Explain to patients the daily eye safety principles to be followed
- Use clinical research-based management of occupational conditions

## COURSE CONTENT

The topics covered in this course include:

- Workplace survey
- Matching the worker to the task
- Pitfalls of industry consulting
- Visual health in selected industries

## COURSE DELIVERY

This module is designed to be delivered over 1 semester. Total delivery time is 28 hours of lectures.

**Learning and Teaching Methods & Resources**

The suggested teaching methods for this course include: PowerPoint presentations, discussions, and case studies.

Suggested equipment for teaching includes:

- Computer & projector
- White board

## RECOMMENDED ASSESSMENT

- Written examination
- Assignments

## TEXT BOOKS

**Prescribed texts**

- Brien Holden Vision Institute Global Optometric Resource Modules, Brien Holden Vision Institute, 2010
- North R. Work and the eye. 2nd Edition. Oxford: Butterworth-Heinemann. 2001.
- Sheedy J and Shaw-McMinn P. Diagnosing and treating computer-related problems. Burlington, MA: Butterworth-Heinemann 2003.
- Carson G, Doshi S and Harvey W. Eye Essentials: Environmental & Occupational Optometry. USA: Butterworth-Heinemann. 2009.

**Recommended readings**

- Association of Practice Management Education. Business Aspects of Optometry. 3rd Edition. Boston: Butterworth-Heinemann. 2010.
- Good GW. Occupational Vision Manual. American Optometric Optometry. Available at: http://www.aoa.org/documents/vision-manual.pdf
- Smith NA. Lighting for health and safety. United Kingdom: Butterworth-Heinemann. 2000
- Pritchard DC. Lighting. 3rd Edition. Longman. 1985.
- Farb MD. OSHA Eye Safety Manual and CD: Introductory but comprehensive OSHA (Occupational Safety and Health) Training for the Managers and Employees in a Worker Safety Program and Injury Prevention and Vision Care. University Of Health Care. 2005.
- Benjamin W. Borish's Clinical Refraction. St Louis, Missouri: Butterworth-Heinnemann. 2007.
- Jaggernath, J, Haslam, D, Naidoo, K. (2013) Climate change: Impact of increased ultraviolet radiation and water changes on eye health. *Health*, Vol.5, No.5, 921-930.
- Naidoo, K, Jaggernath, J, Maharaj, Y. (2011). Eye safety in the work environment and the role of the optometrist, *Occupational Health Southern Africa*, May/June 2011, p2-7.

## USEFUL WEBSITES

- American Optometric Association Occupational Vision Manual: http://www.aoa.org/x5358.xml

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Level 4 North Wing Rupert Myers Building
Gate 14 Barker Street UNSW Sydney 2052
PO Box 6328 UNSW 1466 Sydney NSW

www.brienholdenvision.org
academy.brienholdenvision.org

Brien Holden Vision Institute Academy is the education branch of the Brien Holden Vision Institute.