

Program: **Certificate in Occupational Health & Safety**

Course: COHS 3340 – Ergonomics

Instructor: **Donald MacDonald**

Course Description:

Ergonomics is the study of workers interaction with their workplace. Health and safety professionals need to recognize these hazards and that good ergonomic management will result in reduction of injuries and increases in productivity. This course will provide an introduction to the subject of ergonomics and explain the need and process of: ergonomic hazard assessment; and the development of solutions and the process to evaluate the changes implemented.

Learning Outcomes:

- Recognize the different and varied definitions of ergonomics.
- Describe the difference between ergonomics and human factors.
- Recognize the various disciplines within the study of ergonomics.
- Describe the breadth of how ergonomics is used in today's society.
- Describe how provincial and federal governments regulate ergonomics in Canada
- Distinguish between the various standards organizations (i.e. CSA, ANSI, ISO, etc.)
- Identify the ergonomics guidelines used within Canada
- Distinguish between physical and cognitive ergonomics provide a definition of each.
- Identify the systems approach for conducting ergonomic assessments
- Describe the steps to completing a job demands analysis
- Define organizational ergonomics and how it fits within the occupational setting.

Course Outline:

Module 1: Introduction to Ergonomics

Module 2: Regulations, Guidelines and Enforcement in Canada

Module 3: Human Anatomy and Physiology

Module 4: Organizational Ergonomics

Module 5: Cognitive Ergonomics

Module 6: Physical Ergonomics

Module 7: Ergonomics Process

Module 8: Design

Academic Requirements:

- 8 module Quizzes worth 80%
- 1 written assignment worth 20%.

Other:

42 hours of contact work

5 BCRSP Points

BCRSP Domain: Ergonomics (ERG)