



## Course Descriptor CNMN3002 CONSTRUCTION SAFETY

<b>Proposed Academic Year</b>	2021-22	<b>Last Reviewed Academic Year</b>	2021-22
<b>Course Code</b>	CNMN3002	<b>Course Title</b>	Construction Safety
<b>Credit hours</b>	4	<b>Level of study</b>	3
<b>College / Centre</b>	College of Engineering	<b>Department</b>	Civil and Environmental Engineering
<b>Co-requisites</b>	None	<b>Pre-requisites</b>	None

### 1. COURSE OUTLINE

This course covers legislation, theory and practice relating to management of occupational safety and health in the construction industry. It examines basic elements of a safety and health program for design professionals and construction contractors including both national and international regulatory requirements.

### 2. AIMS

This course aims to develop the student's ability to recognize, avoid, and prevent unsafe conditions that can occur, and the management competencies and practices to ensure occupational safety and health in the construction industry.

### 3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS

<b>Learning Outcomes (Definitive)</b>	<b>Teaching and Learning methods (Indicative)</b>	<b>Assessment (Indicative)</b>	
Upon successful completion of this course, students will be able to:			
1. Analyse and interpret key national and international legislation relating to health and safety in the construction industry.	Lecturers, tutorials, group discussions	Examinations, Assignment	Individual
2. Interpret general safety and health provisions in international standards and references applicable to specific hazardous conditions and practices in construction.	Lecturers, tutorials, group discussions	Examinations, Assignment	Individual
3. Develop and assess health and safety policies, procedures and programs	Lecturers, tutorials, group discussions	Examinations, Assignment	Individual
4. Evaluate different types of personal protective equipment (PPE), and conduct site emergency and accident investigations.	Lecturers, tutorials, group discussions	Examinations, Assignment	Individual
5. Conduct a hazard identification and risk assessment for a construction site.	Lecturers, tutorials, group discussions	Examinations, Assignment	Individual

### 4. ASSESSMENT WEIGHTING



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Assessment	Percentage of final mark (%)
Assignment	30%
Mid-term Examination	30%
Final Examination	40%
<b>TOTAL</b>	<b>100%</b>

**5. ACHIEVING A PASS**

Students will achieve 4 credit hours for this course by passing **ALL** of the course assessments and achieving a **minimum overall score of 50%**

***NB \*Ensure that ALL learning outcomes are taken into account***

**6. COURSE CONTENT (Indicative)**

Introduction to and Development of Safety and Health
Terminology and Accident Theory
OSHA and National Standards and Inspections
OSHA and National Standards and Inspections
Accident Investigation
Accident Investigation
Fall Protection
Fall Protection
Excavation
Excavation
Machine Guarding
Confined Spaces
Personal Protective Equipment
Steel Erection
Explosives, Blasting, and Demolition
Explosives, Blasting, and Demolition
Rigging: Ropes and Hoists
Cranes
Electrical Hazards
Electrical Hazards
Scaffolding
Scaffolding
Welding
Welding
Industrial Hygiene
Industrial Hygiene
Hearing Related Issues
Hearing Related Issues
Case studies
Case studies
Case studies and Revision.



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<b>TOTAL HOURS</b>	<b>60</b>
Plus <b>RECOMMENDED INDEPENDENT STUDY HOURS</b>	<b>120</b>
<b>TOTAL COURSE HOURS</b>	<b>180</b>

**7. RECOMMENDED REFERENCES**

**Core text/s:**

David L. Goetsch (2018) Occupational Safety and Health for Technologists, Engineers and Managers, 9rd Edition, Pearson, Essex.

**Library + online resources:**

OSHA Reports

**Open Educational Resources:**



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