UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

CONTINUING STUDIES

Occupational Health and Safety Officer

APPLY TODAY

TransCanada is offering this course to eligible participants at **NO COST** as a commitment to skills development in Northern BC.

To determine your eligibility call Rob Bryce at 250-960-5982.

ABOUT

UNBC Continuing Studies and TransCanada are partnering together to give local community members the opportunity to develop their skillsets to attain gainful employment on future LNG activities in Northern BC.

Occupational Health and Safety is a specialized field that focuses on the health and safety needs of employees and the impact of the workplace on the environment. Industry, government, First Nations, and businesses require professionals who can anticipate, assess, and communicate risks, as well as develop programs designed to improve health in the work environment. In this 9 week program, students will acquire the necessary skills to work in this demanding field.

Training Dates:

September 29, 2014 - December 11, 2014

Training Location: Prince George

ROB BRYCE
PHONE **250-960-5982**
EMAIL **rob.bryce@unbc.ca**

COURSE CONTENT

- Occupational Health and Safety Fundamentals
- OH&S Lefgislation - Act and Regulation
- Workplace Hazard Analysis and Risk Assessment and Control
- Hazardous Materials and Occupational Hygiene
- Fire Safety Planning and Systems
- Emergency Preparedness and Response
- Safety inspections; Accident Investigations and Reporting
- Safety Program Design and Analysis
- Safe Trenching, Excavation and Ground Disturbance

TransCanada
In business to deliver

1 Background

UNBC Continuing Studies and TransCanada are partnering together to give local community members the opportunity to develop their skillsets to attain gainful employment on future LNG activities in Northern BC.

Occupational Health and Safety is a specialized field that focuses on the health and safety needs of employees and the impact of the workplace on the environment. Industry, government, First Nations, and businesses require professionals who can anticipate, assess, and communicate risks, as well as develop programs designed to improve health in the work environment. In this 9 week program, students will acquire the necessary skills to work in this demanding field.

2 Training Dates and Opportunity

UNBC and TransCanada will be delivering the Occupational Health and Safety Program in Prince George BC, which will provide training opportunities for participants from Northern BC. This program will incorporate Occupational Health and Safety Officer classes specializing in technical and theoretical applications.

This program will be delivered September 29nd - December 11th, 2014 and run from 8:30 am – 4:30 pm on scheduled dates.

Students must attend all classes. Class dates are as follows:

- ✓ September 29th – October 3rd
- ✓ October 6th -7th
- ✓ October 14th – 17th
- ✓ October 20th – 24th
- ✓ October 27th Nov 1st
- ✓ November 12th – 14th
- ✓ November 17th – 20th
- ✓ December 8th-11th

3 Eligibility

To determine the eligibility of participants for this training program, participants must meet the minimum industry requirements. Screening criteria for candidates include:

- ✓ At least 18 years of age;
- ✓ Legally entitled to work in Canada;
- ✓ Currently living in BC;
- ✓ Computer literate and able to operate Microsoft Office Suite;
- ✓ Familiarity using electronic devices;
- ✓ Strong oral and verbal communication skills;
- ✓ Comfortable and confident talking with people including groups of people; and
- ✓ Physically fit: able to walk up to 10 km per day and work in all weather conditions.

4 Training Program

Occupational Health and Safety is a specialized field that focuses on the health and safety needs of employees and the impact of the workplace on the environment. Industry, government, First Nations, and businesses require professionals who can anticipate, assess, and communicate risks, as well as develop programs designed to improve health in the work environment. In this program, students will specialize in the following fields:

1.0 Occupational Health & Safety Fundamentals (4-Days)

- Overview of OH&S Field and discusses how health and safety relate to an organization's overall management system.
- Addresses leadership commitment, open communication, and legal accountability as core concepts that form the basis for effective safety programs.
- Explores the wide variety of functions within the OH&S field and the required resources for the safety generalist.

2.0 OH&S Legislation - Act & Regulation (4-Days)

- WorkSafe BC
- BC Safety Authority
- Federal Safety
- Transportation of Dangerous Goods
- WHMIS/GHS
- Oil and Gas Activities Act
- BC One Call

3.0 Workplace Hazard Analysis and Risk Assessment & Control (4-Days)

- Introduces the hierarchy of workplace hazard controls - elimination, engineering, administrative and personal protective equipment.
- Explains how to successfully eliminate or reduce the hazards and risks associated with several work processes.
- Explain what hazard analysis is and describe the process.
- Explain the relationship between Job, Duty, Task, and Element.
- State the steps involved in developing safe work procedures.
- Analyze a job task, identify related hazards, and develop safe work procedures to address hazards that cannot be eliminated.
- Examines in detail, personal facilities, safety through design, lighting and ventilation systems, materials handling, basic electrical safety, lockout and de-energization, personal protective equipment, lift trucks and fall protection.
- Examines, in detail: guarding, metalworking machines, woodworking machines, welding and excavation, blasting, confined space entry, commercial fleet safety, automated processes, ladders and scaffolds.
- Define risk assessment and related terms.
- Explain responsibilities for risk assessment and control.
- Describe an effective risk assessment model.
- Apply the assessment model to quantify and compare risks.

- Explain the risk control planning process and apply it to develop control measures.

4.0 Hazardous Materials & Occupational Hygiene (4-Days)

- Introduces legislation regulating hazardous materials used and transferred in the workplace and the environment.
- Fully explores workplace Hazardous Materials Information System (WHMIS) and Transportation of Dangerous Goods (TDG) requirements.
- Investigates lead abatement and asbestos management and control options for their workplace application.
- This theory course introduces the concepts of recognizing, identifying, monitoring, evaluating, and recommending control measures for common chemical and physical hazards in the workplace.
- Discusses the benefits of implementing an occupational hygiene program.
- Explores a wide range of hygiene topics including permissible levels, exposure limits, radiation, temperature and pressure extremes, asbestos contamination, and ventilation design.
- Familiarize Students with Industrial Hygiene monitoring devices commonly used – Noise Level meters, gas testing, etc.

5.0 Fire Safety Planning & Systems (4-Days)

- Begins with the history of fire and how its use and misuse have influenced humanity over the centuries. Includes the chemistry of fire, fire hazards, fire causes, and fire statistics.
- Introduces applicable legislation and fire codes.
- Discusses fire prevention activities, occupancy requirements, and construction considerations for fire safety.
- Introduces the role of firefighters in life safety and prevention activities.
- Explores fire detection and suppression. Includes fire detection systems, portable fire extinguishers, automatic sprinkler systems, fire, smoke, and heat alarms, and fire annunciation panels.
- Discusses the specific detection and suppression issues of chemical, heating, and electrical hazards.
- Describes the firefighter's role in prevention and suppression.

6.0 Emergency Preparedness & Response (4-Days)

- Identify Emergency situations and appropriate ERP.
- Focuses on the reduction of the effects of disasters through established and proven workplace emergency plans, procedures, and training.
- Evaluates the issues that arise prior to, during, and immediately following an emergency, as well as the long-range recovery challenges that follow.
- Discusses the development of an emergency response team and its implications.
- Includes an overview of community and government disaster services.

7.0 Safety Inspections; Accident Investigations & Reporting (4-Days)

- Explain the purposes of conducting inspections.

- Determine what needs to be covered in inspections.
- Identify people responsible for inspections.
- Determine the major types of inspections and when inspections must be conducted.
- Explain effective ways to conduct an inspection.
- Develop documentation for inspections.
- Conduct inspections.
- Identify various inspection tools and their application.
- Explain the legal requirements for investigations and reports
- Identify basic accident causes and contributing factors
- Explain and apply the process for investigating accidents or other incidents

8.0 Safety Program Design & Analysis (4-Days)

- Discusses how to coordinate, develop, implement, and maintain an OH&S program within an organization.
- Explores how political, cultural, economic, and industry climates as well as corporate and personal values, influence safety culture.
- Introduces management commitment, employee involvement, communication, supervision, education and training, safety recognition, safety policy, and safety committees.
- Provides legal, moral, and economic reasons for implementing a safety program.
- Outlines how to develop the policies and procedures required for a written OH&S program, including workplace inspections, accident investigations, record keeping, first aid, ergonomics, emergency preparedness, job hazard analysis, training, work procedures and regular program review.
- This course develops student ability to objectively analyze (audit) the effectiveness of an organization's occupational health and safety program and overall safety system.
- Explores several measurement and analysis tools and investigates various approaches used to determine safety program effectiveness.
- Explains and contrasts compliance analyses and best practice analyses.
- Describes several methods of designing and administering review criteria, questionnaires, perception surveys, interviews, and a final report.
- You analyze either the workplace inspection component or the safety committee component of a safety program at an organization of your choice. Plan to spend about twelve hours at the workplace you choose. You observe the work and the work environment, review documents, administer a questionnaire, and conduct interviews. You present the results of your component analysis in a final report.

9.0 Excavation & Ground Disturbance Safety (1 day)

- Identify types of ground disturbances
- BC One-Call and the damage prevention process in BC
- Understanding of relevant legislation and regulations
- Soil terminology and classifications
- Conditions and forces that can act upon soil to create the potential for dangerous cave-ins.
- Discusses methods used to protect an excavation, including shoring, shielding, and sloping

- Hazard assessment and controls
- Overhead power lines
- Pipelines and crossing agreements

6 Learning Outcomes

Upon completion of the training program, participants will be able to:

- ✓ Identify appropriate legislation, acts and regulations for OHS
- ✓ Explain how to successfully eliminate or reduce the hazards and risks associated with several work processes.
- ✓ Analyze a job task, identify related hazards, and develop safe work procedures to address hazards that cannot be eliminated.
- ✓ Examines in detail, personal facilities, safety through design, lighting and ventilation systems, materials handling, basic electrical safety, lockout and de-energization, personal protective equipment, lift trucks and fall protection.
- ✓ Describe an effective risk assessment model; apply the assessment model to quantify and compare risks.
- ✓ Explain the risk control planning process and apply it to develop control measures.
- ✓ Investigates lead abatement and asbestos management and control options for their workplace application.
- ✓ Asses fire detection and suppression. Includes fire detection systems, portable fire extinguishers, automatic sprinkler systems, fire, smoke, and heat alarms, and fire annunciation panels.
- ✓ Identify Emergency situations and appropriate ERP.
- ✓ Evaluates the issues that arise prior to, during, and immediately following an emergency, as well as the long-range recovery challenges that follow.
- ✓ Explain the purposes of conducting inspections, determine what needs to be covered in inspections, identify people responsible for inspections.
- ✓ Provide legal, moral, and economic reasons for implementing a safety program.
- ✓ Analyze (audit) the effectiveness of an organization's occupational health and safety program and overall safety system.

7 Program Costs and Supplies

Tuition and classroom materials are supplied to accepted participants, and are covered by TransCanada. Participants are responsible to provide the following PPE:

- ✓ Hard Hat
- ✓ Visi Vest
- ✓ Protective Eyewear
- ✓ Safety Footwear