

Lesson Plan:

**Lesson Title:** Health, Safety and Environmental Specialist. The lesson plan will introduce, describe and associate the HS&E specialist occupation to the oil processing industry and define the need for the job.

**Suggested Timeframe:** one class period of 80 minutes taught to the target audience is 20-25 (grade 9-12) students enrolled in Emergency Trauma Technician and Emergency Medical Technician classes.

**Standards Addressed:** Language Arts: (A-1) Write (note taking) and speak well for a variety of audiences.

(A-2) Writing sentences and paragraph structure

(A-5) Revise and edit a peer writing (notes)

(B-1) Vocabulary build and cues

(B-2) Reflect on; analyze a variety of oral and written information

Employability: (A-1) Develop and maintain knowledge of work ethics

Listen/Speak: (A-3.1) Apply knowledge/ comprehend charts and graphs

Technology: (A-1) Use computer to enter & retrieve information

(A-2) Use technology tools to learn, communicate and produce

(B-1) Identify & locate information on computer

(B-2) Choose sources from a variety of computer databases

(C-1) Use technology to observe, analyze and interpret info.

**Lesson Objectives:**

\* Students will be able to describe why HSE occupation is necessary in the oil processing industry.

\* Student will know courses/classes offered in this school to prepare and benefit students interested in HSE.

\* Students will know basic vocabulary and identify basic acronyms of HSE field.

\* Students will know basic responsibilities of HSE specialist.

\* Students will be able to list general training requirements for HSE Specialist and HSE Managers.

\* Students will know necessity of document control procedures followed by HSE.

\* Students will be able to generate a basic Hazard Analysis card.

\* Students will know the HSE management hierarchy.

**Anticipatory Set;** To prepare students for specific information related to Health Safety Environmental Specialist occupation they will be introduced to the APICC Priority Occupation Report. The report identifies priority occupations with defined levels of need such as; shortage (Red), concern (Blue) and availability (Green). The 10-year study predicts HSE as an occupational shortage of qualified applicants.

**Assessments;** (1). KWL Chart, (2). Vocabulary matches with definition or acronym, (3). Discussion questions students respond to in a small group, (4). Small group analysis of MEHS Master Schedule for first semester, (5) Students paired to analyze MEHS Master Schedule for second semester and (6) Individualized project with student schedules.

**Lesson Description:** Instructor will engage students in Prudhoe Bay, CCI Industries slide presentation of oil processing industries facilities and lecture on the delicate balance of man and nature. Information and vocabulary introduced will describe and demonstrate that protecting the balance is everyone's responsibility and to assure this value is honored, a specific Health Safety Environmental specialist occupation is created to concentrate on this objective. The presentation will focus on HSE values of (1). Ensure everyone, on every job goes home safely every day, (2) Ensure we comply with every regulatory, company and client required policies, and (3). Ensure proper care and stewardship for the environment.

**Activities:** Students will be directed to complete only the first two sections of the KWL chart with; what they **know** about the HSE job and what they **want** to learn about the HSE job. Key words will be listed on a worksheet with scrambled definitions and or acronyms students will match. A set of guiding questions will spark discussion on HSE training requirements and responsibilities small groups will respond to and record. These same small groups will be given an MEHS 1<sup>st</sup> Semester Master Schedule to record all the courses currently offered that would benefit anyone interested in preparation for a career in HSE. From small groups, students will be paired off to analyze MEHS 2<sup>nd</sup> Semester Master Schedule to record all the courses listed that will benefit anyone interested in preparation for a career in HSE. As a follow-up and check for comprehension, each student will be assigned a classroom laptop computer and directed to log into their academic transcript located in the MEHS Pinnacle Database. Students will list all classes on their transcript that may benefit them in any occupation listed in the APICC

Occupation Priority Report. At the conclusion of the lesson the KWL charts will be returned to students and will briefly list things they **learned** about the HSE job. Time permitting the instructor will guide a discussion on discoveries or patterns students may have made in their transcript analysis.

**Materials:** Know/Want/ Learn (KWL Sheet-handout) \* Alaska Process Industry Careers Consortium's Priority Occupations Report, V6.1 located on [www.apicc.org](http://www.apicc.org) website, \* Prudhoe Bay CCI, photo slide presentation provided by HSE Specialist Theran Berry, \* Kakivik Asset Management's Health , Safety and Environmental Manual, Rev 4.0 May 24, 2012 (handouts: vocabulary, Training Guide, responsibilities, document control procedures), \* Hazard Analysis card format, \* 2012-13 Semester I & II Master Schedules and \* Laptop Computer cart (classroom set 20-25).