

OCCUPATIONAL SKILLS HANDBOOK - UNIT 3E2

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT



New Brunswick
Youth Apprenticeship
Program

PARTNERSHIPS FOR CAREER PREPARATION

March 1998

PREPARING TODAY'S YOUTH FOR TOMORROW'S WORKPLACE

"World Class"

Attitudes - Skills - Knowledge

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

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INFORMATION/DIRECTION

This handbook is designed to provide detailed content on **Unit 3E2 - Working in Your Occupational Area III** of the New Brunswick Youth Apprenticeship Program. It provides, in one document, a compilation of information on all the occupations for the current Phase 3 group.

NOTE: Additional occupations with corresponding objectives will be added to this document on an annual basis as the number of Youth Apprentices entering Phase 3 increases.

Additional information is available by calling (506) 453-8226.

Cluster A NB Youth Apprenticeship Program	Phase 1	1A1 Overview of the Program 4 Hours	1A2 Employee Role/ Responsibilities 2 Hours	1A3 Employer Role/ Responsibilities 2 Hours	
Cluster B Working in New Brunswick	Phase 1	1B1 The NB Economy I 2 Hours	1B2 Introduction to the World of Work 6 Hours	1B3 Employer/ Employee Responsibilities 7 Hours	1B4 Human Rights in the Workplace I 3 Hours
	Phase 2	2B1 The NB Economy II 9 Hours		2B3 Employee Responsibilities Employer Expectations 6 Hours	2B4 Human Rights in the Workplace II 5 Hours
Cluster C Health and Safety	Phase 1	1C1 Safety in the Workplace I 6 Hours	1C2 Introduction to Occupational Health & Safety 6 Hours	1C3 Orientation to WHMIS (Workplace Hazardous Mat. Info System) 6 Hours	1C4 Standard First Aid with CPR 16 Hours
	Phase 2	2C1 Safety in the Workplace II 15 Hours			
	Phase 3	3C1 Safety in the Workplace III 2 Hours			
Cluster D Personal Development	Phase 1	1D1 Communication I 9 Hours	1D2 Interpersonal Relations I 9 Hours	1D3 Job Maintenance I 12 Hours	
	Phase 2	2D1 Communication II 5 Hours	2D2 Interpersonal Relations II 10 Hours	2D3 Job Maintenance II 8 Hours	
	Phase 3	3D1 Communication III 6 Hours	3D2 Interpersonal Relations III 6 Hours	3D3 Job Maintenance III 6 Hours	
Cluster E Occupational Skills	Phase 1	1E1 You and Your Occupation 4 Hours	1E2 Working in Your Occupational Area I 8 Hours	1E3 Computers in the Workplace I 8 Hours	1E4 Business/ Technical Writing I 10 Hours
	Phase 2		2E2 Working in Your Occupational Area II 40 Hours	2E3 Computers in the Workplace II 8 Hours	2E4 Business/ Technical Writing II 10 Hours
	Phase 3		3E2 Working in Your Occupational Area III 80 Hours	3E3 Computers in the Workplace III 8 Hours	3E4 Business/ Technical Writing III 8 Hours
					2E5 Introduction to Communication Equipment 4 Hours
					3E5 Introduction to Computer Communication 4 Hours

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CLUSTER 3E OCCUPATIONAL SKILLS

UNIT OF INSTRUCTION 3E2 WORKING IN YOUR OCCUPATIONAL AREA III

PURPOSE

This unit is designed to provide the Youth Apprentice with the opportunity to apply skills and knowledge to safe, productive work in his/her chosen occupational area.

DELIVERY

Delivery of this unit is accomplished through a combination of on-the-job work experience and provincial or district workshops for a total of approximately 80 hours.

OBJECTIVES

Upon successful completion of this unit of instruction, the Youth Apprentice will be able to:

- 3E2.1 use technology, instruments, tools, and information systems effectively in his/her occupational area;
- 3E2.2 think critically and act logically to evaluate situations, solve problems, and make decisions in his/her occupational area;
- 3E2.3 present a comprehensive report (oral or written) in which he/she describes his/her learning experiences both in the classroom and at the workplace.

The above objectives for Unit 3E2 apply to each occupation identified for the Youth Apprenticeship Program. This "3E2 Occupational Skills Handbook" further breaks down these objectives for each occupation by providing teaching points specific to the particular occupation.

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RECORD OF ACHIEVEMENT “SIGN-OFFS”

Sign-offs take place when the signing authority (i.e. a Youth Apprentice Instructor, high school teacher, workplace trainer or employer, a trainer recognized by the Local Advisory Committee) is confident that the Youth Apprentice has met the required objective.

The Youth Apprentice will provide the “Record of Achievement” document for signing.



YOUTH APPRENTICESHIP PROGRAM
PARTNERSHIPS FOR CAREER PREPARATION

- UNIT 3E2 -

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AGRICULTURE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE AGRICULTURAL OCCUPATION:

..... *approximately 60 hours*

Identify and use various equipment required in the agricultural occupation.

IDENTIFY AND SOLVE PROBLEMS IN DIFFERENT SITUATIONS, SOLVE

.....

3E2.3 IDENTIFY AND DESCRIBE HIS/HER LEARNING EXPERIENCES IN THE WORKPLACE.

approximately 4 hours

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PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

AQUACULTURE TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE AQUACULTURE OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 identify the basic components of a sea cage system in the Bay of Fundy and describe the use of each component;
- 3E2.1.2 describe new developments on cage technology worldwide;
- 3E2.1.3 analyse the environmental conditions necessary for salt water rearing sites;
- 3E2.1.4 analyse management practices that affect environmental conditions in a cage site;
- 3E2.1.5 describe the relationship between smolt quality and fish performance;
- 3E2.1.6 identify techniques used to transfer salmonids from fresh water to salt water;
- 3E2.1.7 identify behavioural characteristics of salmonids;
- 3E2.1.8 describe the relationship between the feeding of the fish and fish performance;
- 3E2.1.9 describe the requirements for successful broodstock holding and spawning;
- 3E2.1.10 describe cage site procedural requirements for disease control;
- 3E2.1.11 identify the diving requirements of a cage site;
- 3E2.1.12 describe the smoltification process of Atlantic salmon and its significance to aquaculture operations.

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QUACULTURE T
(continued)

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE

..... *approximately 16 hours*

PRESENT
H
AND AT THE WORKPLACE.

H
THE CLASSROOM

approximately 4 hours

outline of this report will have been prepared as
Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

ARCHITECTURAL

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE ARCHITECTURAL OCCUPATION:

..... *approximately 45 hours*

3E2.1.1 Use traditional survey equipment (tape, transit, level and accessory equipment)

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE ARCHITECTURAL OCCUPATION.

..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

AUDIO VISUAL PRODUCTION TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE AUDIO VISUAL PRODUCTION OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 describe generally the effect of television and other media on individuals and on society;

3E2.1.2 write an effective script for a video production;

3E2.1.3 describe the role which graphic arts, journalism, and video production technology play in the presentation of news events;

3E2.1.4 discuss the extent to which CNN makes the news more than reports it;

3E2.1.5 communicate effectively, both orally and in writing, with emphasis on conciseness, clarity, and accuracy.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE AUDIO VISUAL PRODUCTION OCCUPATION:

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

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AUTOMOTIVE SERVICE TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE AUTOMOTIVE SERVICE TECHNICIAN OCCUPATION:
..... *approximately 60 hours*

3E2.1.1 position motor vehicle on hoist, raise to working height, lower and remove vehicle following manufacturer's operating procedures;

3E2.1.2 raise motor vehicle using mechanical or hydraulic floor jack and properly position floor stands under vehicle, following manufacturer's recommendations;

3E2.1.3 safely use specialized automotive shop equipment following commonly accepted industrial practices.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE AUTOMOTIVE SERVICE TECHNICIAN OCCUPATION.
..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

BEAUTY CULTURE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE BEAUTY CULTURE OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 use razors, scissors, clippers, combs, brushes, and blow dryers safely.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE BEAUTY CULTURE OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

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BUSINESS

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE BUSINESS WORLD:

..... *approximately 45 hours*

- 3E2.1.1 apply basic math operations to business tasks such as calculating: extensions, discount terms, sales taxes, markups, payroll deductions, quotas, etc.;
- 3E2.1.2 set up a general ledger chart of accounts for a service industry: conversion date; create the company profile; organize and prepare the chart of accounts; add, delete, and amend general ledger accounts; prepare an opening entry to establish account balances and history; back up data;
- 3E2.1.3 perform an analysis of a financial statement;
- 3E2.1.4 compare and contrast 3 styles of management;
- 3E2.1.5 communicate effectively with customers, fellow workers and the general public.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE BUSINESS WORLD.

..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

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CARPENTRY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE CARPENTRY OCCUPATION:
..... *approximately 60 hours*

3E2.1.1 identify and use various hand, power, and stationary power tools required in the Carpentry occupation.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE CARPENTRY OCCUPATION.
..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

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CHILD CARE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE CHILD CARE OCCUPATION:

..... *approximately 45 hours*

3E2.1.1 plan an activities program that fits the needs of infants and toddlers from birth to 30 months;

3E2.1.2 apply effective methods for resolving communications problems among children;

3E2.1.3 apply different observation instruments effectively in a child care setting;

3E2.1.4 develop a constructive child guidance plan;

3E2.1.5 adapt educational interventions to the needs of infants and toddlers with motor problems;

3E2.1.6 provide assistance to children with emotional challenges;

3E2.1.7 accommodate children with speech and hearing problems;

3E2.1.8 organize interest centres where the child can take part in creative activities.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE CHILD CARE OCCUPATION.

..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

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COMPUTER SALES / SERVICE / MAINTENANCE TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE COMPUTER SALES/SERVICE/MAINTENANCE TECHNICIAN OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 apply good customer relations practices;
- 3E2.1.2 use the oscilloscope to measure voltage, period, phase angle, and frequency;
- 3E2.1.3 recognize the schematic symbols of the various semiconductor devices;
- 3E2.1.4 analyze and troubleshoot filtered power supplies;
- 3E2.1.5 explain the operation of digital logic gates;
- 3E2.1.6 discuss microprocessors, explain their operation and give examples of their applications;
- 3E2.1.7 interface a microprocessor with the outside world.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE COMPUTER SALES/SERVICE/MAINTENANCE TECHNICIAN OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

COMPUTER SCIENTIST / PROGRAMMER

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE COMPUTER SCIENTIST/PROGRAMMER OCCUPATION:

..... *approximately 45 hours*

3E2.1.1 demonstrate a knowledge of key terms and explain the current technology as it applies to **HARDWARE**, including: the system unit, peripherals, input devices, output devices, the processor, storage devices, and communications hardware;

3E2.1.2 demonstrate a knowledge of key terms and explain the current technology as it applies to **SOFTWARE**, including: systems software, applications software, communications software, software licensing, piracy, and viruses;

3E2.1.3 demonstrate the ability to use a **WORD PROCESSING** package to create, format, edit, save, retrieve, and print a document and to use advanced features such as merge, graphics, and tables;

3E2.1.4 demonstrate the ability to use **INTERNET** to conduct research and retrieve information from a variety of sources.

3E2.3 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE COMPUTER SCIENTIST/PROGRAMMER OCCUPATION:

..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

COMPUTER SYSTEMS TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE COMPUTER SYSTEMS TECHNICIAN OCCUPATION:
..... *approximately 45 hours*

3E2.1.1 demonstrate knowledge of proper shop practices including safety procedures and the selection and use of various shop tools and testing equipment.

3E2.1.2 use diagnostic software and hardware;

3E2.1.3 use application software.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE COMPUTER SYSTEMS TECHNICIAN OCCUPATION.
..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

COMPUTERIZED NUMERICALLY CONTROLLED MANUFACTURING

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE COMPUTERIZED NUMERICALLY CONTROLLED MANUFACTURING OCCUPATION:

..... *approximately 50 hours*

- 3E2.1.1 make freehand sketches;
- 3E2.1.2 read and interpret title blocks and drawing changes;
- 3E2.1.3 recognize and apply the alphabet of lines in basic sketching and mechanical drawings;
- 3E2.1.4 display an understanding of section views and crosshatching;
- 3E2.1.5 identify various hardware and equipment used in Computerized Numerically Controlled Manufacturing;
- 3E2.1.6 display an understanding of Computerized Numerically Controlled Manufacturing terminology and technology;
- 3E2.1.7 use related computer software;
- 3E2.1.8 recognize and comprehend thread representation and specifications;
- 3E2.1.9 display an understanding and apply proper tolerancing procedures;
- 3E2.1.10 use semi-precision and precision measuring devices to determine the accuracy of a workpiece;
- 3E2.1.11 correctly use various gauging and comparison devices;
- 3E2.1.12 inspect and identify (tag) incoming materials.

... continued on next page

COMPUTERIZED NUMERICALLY CONTROLLED MANUFACTURING
(continued)

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE COMPUTERIZED NUMERICALLY CONTROLLED MANUFACTURING OCCUPATION.
..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

Cook

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE COOK OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 Demonstrate safe use of equipment:

- knives
- slicers
- grinders
- microwaves
- ovens
- fryers
- mixers

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE COOK OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

EDUCATION

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE EDUCATION (TEACHING) PROFESSION:

..... *approximately 45 hours*

3E2.1.1 develop lesson plans including detailed performance objectives or educational outcomes in an area of his/her expertise and interest;

3E2.1.2 discuss the importance of consistency on the part of the teacher in helping students build a measure of self-discipline;

3E2.1.3 discuss in detail some key issues to be borne in mind by the new teacher as he/she prepares for the first few days on the job;

3E2.1.4 differentiate between OBJECTIVE and SUBJECTIVE assessment tools;

3E2.1.5 discuss the role of the teacher as “impartial judge” in the assigning of scores and evaluation of student performance when objective assessment tools cannot be used;

3E2.1.6 suggest imaginative and creative teaching methods for topics which have traditionally been “boring” to teach and learn;

3E2.1.7 discuss the advantages and disadvantages of some popular audio-visual aids in classroom teaching settings.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE TEACHING PROFESSION.

..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

ELECTRICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE ELECTRICIAN OCCUPATION:
..... *approximately 60 hours*

3E2.1.1 use lockout/tagout procedures;

3E2.1.2 use hand/power/pneumatic/explosive activated tools safely;

3E2.1.3 construct and verify an alternating current circuit.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE ELECTRICIAN OCCUPATION.
..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

ELECTRONICS TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE ELECTRONICS TECHNICIAN OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 demonstrate knowledge of proper shop practice, including safety procedures;

3E2.1.2 demonstrate a knowledge of Kirchhoff's Laws;

3E2.1.3 analyze and construct a complex voltage divider;

3E2.1.4 demonstrate proper troubleshooting techniques;

3E2.1.5 demonstrate an understanding of the operation of digital logic gates.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE ELECTRONICS TECHNICIAN OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

ELECTRONIC TECHNOLOGY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE ELECTRONIC TECHNOLOGY OCCUPATION:
..... *approximately 45 hours*

3E2.1.1 identify and use various meters and instruments required in the electronic technology occupation.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE ELECTRONIC TECHNOLOGY OCCUPATION.
..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

ENGINEERING

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE FIELD OF ENGINEERING:

..... *approximately 40 hours*

- 3E2.1.1 demonstrate a basic awareness of the basic concepts of electricity and magnetism;

- 3E2.1.2 demonstrate a basic knowledge of manual and automated drafting (terminology, instruments, and concepts):
 - uses and maintenance of drafting equipment and instruments
 - line types required to complete drafting activities
 - identification of standard drawing types, scales, lettering and line styles

- 3E2.1.3a demonstrate a basic awareness of the terminology and expressions used in the area of applied mechanics:
 - fundamentals of mechanics
 - rigid bodies
 - mass
 - vectors
 - beams
 - trusses
 - frames
 - machines
 - friction

OR

- 3E2.1.3b demonstrate a basic knowledge of at least one software program for engineers, e.g., paradox, quattro pro.

Note: *depending on which field of engineering the student has chosen to pursue and the requirements of the employer, the student may choose to complete either objective 3E2.1.3a or 3E2.1.3b.*

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ENGINEERING
(continued)

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE FIELD OF ENGINEERING.
..... *approximately 36 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

FINE ARTS/HISTORY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE FINE ARTS/HISTORY OCCUPATIONAL AREA:

..... *approximately 45 hours*

3E2.1.1 react in a brief essay to the following statement attributed to Carl Sandburg: "The past is a bucket of ashes."

3E2.1.2 using INTERNET or other research tools to document the history of The Impact of the CBC on The Viability of the Performing Arts In Canada.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS , SOLVE PROBLEMS, AND MAKE DECISIONS IN THE FIELD OF FINE ARTS/HISTORY..

..... *approximately 31 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

FOREST RANGER

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE FOREST RANGER OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 explain and demonstrate how to read a compass;
- 3E2.1.2 convert compass readings from magnetic to true bearings and vice versa;
- 3E2.1.3 demonstrate how to hold a compass to take readings;
- 3E2.1.4 demonstrate how to establish direction of travel using a compass;
- 3E2.1.5 demonstrate the use of a compass with a map;
- 3E2.1.6 describe the advantages of using computers in the forest service;
- 3E2.1.7 measure distances accurately on maps and, through the use of the appropriate scale, convert these distances to actual ground distances;
- 3E2.1.8 identify the common forestry map symbols;
- 3E2.1.9 identify the main topographic features shown in an aerial photograph such as roads, streams, cleared land, cut-over land, forested land;
- 3E2.1.10 identify main forest types such as hardwood, softwood, and mixed wood stands and mark their outlines on a photograph;
- 3E2.1.11 demonstrate procedures for the operation of a 2-way radio;
- 3E2.1.12 demonstrate safe use of equipment used by a Forest Ranger, i.e. boats, canoes, snowmobiles, trucks.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

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FOREST RANGER

(continued)

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE FOREST RANGER OCCUPATION.
..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

FORESTRY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE FORESTRY OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 use compass, maps and aerial photographs;

3E2.1.2 use fire fighting equipment and tools;

3E2.1.3 use fire prevention techniques;

3E2.1.4 use blaze or flag techniques.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE FORESTRY OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

FUNERAL DIRECTOR

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE FUNERAL DIRECTOR OCCUPATION:

..... *approximately 66 hours*

- 3E2.1.1 identify specialized computer applications and software available to Canadian funeral homes, and operate a computer using specific software applications;
- 3E2.1.2 manipulate and carry stretchers and caskets in all situations;
- 3E2.1.3 lift and carry human remains in all situations;
- 3E2.1.4 assist as directed with embalming and casketing, setting up of flowers, grave decorations, church set-ups, and house set-ups;
- 3E2.1.5 be familiar with routine documentations;
- 3E2.1.6 be able to read and understand the medical certificate of death;
- 3E2.1.7 identify and be familiar with embalming instruments, machines, and techniques;
- 3E2.1.8 explain the importance of colour and its effects on the appearance of the deceased;
- 3E2.1.9 identify and use types of artificial and natural illumination;
- 3E2.1.10 identify types of cosmetics used in post-mortem cosmetology.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE FUNERAL DIRECTOR OCCUPATION:

..... *approximately 10 hours*

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FUNERAL DIRECTOR
(continued)

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

GEOLOGY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE GEOLOGIST OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 demonstrate a practical awareness of active tectonics;

3E2.1.2 using INTERNET or other means, perform research on 1 or more of the following:

1. The USGS Global Change Research Program
2. The USGS National Marine & Coastal Geology Program
3. The Cecil & Ida Green Pinon Flat Observatory

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS , SOLVE PROBLEMS, AND MAKE DECISIONS IN THE FIELD OF GEOLOGY.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

GRAPHIC ARTS

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE GRAPHIC ARTS OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 demonstrate basic drawing skills (still life);
- 3E2.1.2 demonstrate an understanding of lighting/shading;
- 3E2.1.3 demonstrate an awareness of the importance of colour;
- 3E2.1.4 follow the production flow of a job docket and relate this information to the client and to the production process;
- 3E2.1.5 describe the instruments and/or tools and their role in production relating to the specific on-the-job experience (e.g. silk screen production process).

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE GRAPHIC ARTS OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

HEAVY EQUIPMENT REPAIR TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE HEAVY EQUIPMENT REPAIR TECHNICIAN OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 work on, start and remove heavy equipment following manufacturers' operating procedures;
- 3E2.1.2 raise heavy equipment when needed with hydraulic jack and properly position floor stands under equipment, following manufacturers' recommendations;
- 3E2.1.3 safely use specialized heavy shop equipment, following commonly accepted industry practices.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE HEAVY EQUIPMENT REPAIR TECHNICIAN OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

HORTICULTURIST / LANDSCAPE TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE HORTICULTURIST / LANDSCAPE TECHNICIAN OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 demonstrate an understanding of plant structures & functions;
- 3E2.1.2 demonstrate a knowledge of the growth cycle of plants and plant reproduction from pollination to seed production;
- 3E2.1.3 demonstrate a knowledge of the principles of soil management as they relate to plant growth;
- 3E2.1.4 describe factors which contribute to soil fertility;
- 3E2.1.5 identify agricultural soil amendments as they relate to plant production;
- 3E2.1.6 demonstrate a knowledge of plant diseases and common insects relating to horticulture and arboriculture;
- 3E2.1.7 describe the methods used to control weeds, insects, and diseases;
- 3E2.1.8 demonstrate a knowledge of the techniques of laying sod.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE HORTICULTURIST / LANDSCAPE TECHNICIAN OCCUPATION:

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 -

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

HOSPITALITY AND TOURISM - FACILITY AND ACCOMMODATION

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE HOSPITALITY AND TOURISM INDUSTRY:

..... *approximately 60 hours*

- 3E2.1.1 use the front office equipment, including computer hardware and software, to provide guest services;
- 3E2.1.2 communicate effectively both orally and in writing with clients, public and staff;
- 3E2.1.3 identify specific methodology that is recommended for solving problems in the hospitality tourism industry;
- 3E2.1.4 handle inquiries/complaints with tact and politeness and identify methods of transmitting complaints to the proper authorities;
- 3E2.1.5 ensure that customer inquiries/complaints are addressed.
- 3E2.1.6 describe the role and responsibilities of front office personnel in relation to the service, equipment and facilities offered by a broad range of properties.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE HOSPITALITY AND TOURISM INDUSTRY.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline for this report will have been prepared as part of Unit 3E4 - Business Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

HOSPITALITY AND TOURISM - FOOD AND BEVERAGE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE HOSPITALITY AND TOURISM INDUSTRY:

..... *approximately 60 hours*

- 3E2.1.1 perform the cashier function;
- 3E2.1.2 accomplish mise en place;
- 3E2.1.3 establish and maintain a food and beverage control system;
- 3E2.1.4 use available computer technology as a tool to input data, manipulate and retrieve information, and provide service.
- 3E2.1.5 communicate effectively with clients, public and staff.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE HOSPITALITY AND TOURISM INDUSTRY.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

HOSPITALITY AND TOURISM - TRAVEL AND TOURISM

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE HOSPITALITY AND TOURISM INDUSTRY:

..... *approximately 60 hours*

3E2.1.1 identify the essential components of information systems used in the travel and tourism industry;

3E2.1.2 describe the different travel information databases available to the travel/tourism industry;

3E2.1.3 investigate the benefits of information systems in the travel/tourism industry;

3E2.1.4 examine current trends and issues in the information systems.

3E2.1.5 communicate effectively with clients, public and staff.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE HOSPITALITY AND TOURISM INDUSTRY.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

HUMAN RELATIONS / SOCIAL WORK / PSYCHOLOGIST

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE HUMAN RELATIONS / SOCIAL WORK / PSYCHOLOGIST PROFESSION:

..... approximately 45 hours

3E2.1.1 demonstrate an awareness of the importance of clear and concise oral and written communication skills and a willingness to apply those skills both in training settings and in the workplace;

3E2.1.2 apply the problem solving process: preparation, production, and evaluation to a typical festering employee/employee dispute;

3E2.1.3 explain the stages of grief and demonstrate them in planning counselling for a teenager going through his/her first experience with the loss of a loved one;

3E2.1.4 demonstrate types of non-verbal communication and the significance of each in a counselling setting: body orientation, posture, eyes, gestures, voice, touch, clothing;

3E2.1.5 develop case scenarios to illustrate the following styles of conflict resolution: win-lose, lose-lose, win-win;

3E2.1.6 demonstrate safe lifting techniques;

3E2.1.7 inspect a work site and identify and correct unsafe conditions for workers, clients, patients, and the general public.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE HUMAN RELATIONS / SOCIAL WORK / PSYCHOLOGY PROFESSION.

..... approximately 31 hours

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... approximately 4 hours

The outline of this report will have been prepared as part of Unit 3E4 - Business/

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

Technical Writing III.

INDUSTRIAL MECHANICS

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE INDUSTRIAL MECHANICS OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 correctly select and use trade hand and/or power tools in a safe and efficient manner when maintaining machinery to manufacturers' specifications.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE INDUSTRIAL MECHANICS OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

INDUSTRIAL TECHNOLOGIST

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE INDUSTRIAL TECHNOLOGIST OCCUPATION:

..... *approximately 50 hours*

3E2.1.1 perform calculations with complex numbers in rectangular, trigonometric, and exponential form;

3E2.1.2 demonstrate proper workplace safety techniques;

3E2.1.3 calculate the values of voltages and currents in DC circuits;

3E2.1.4 manipulate and solve basic equations relating to AC current, voltage, and power;

3E2.1.5 perform calculations related to pressure and level measurement;

3E2.1.6 apply the recommended procedures for installing and maintaining instruments in accordance with ISA, CSA, UL, or other approved industrial standards;

3E2.1.7 demonstrate first hand knowledge of the basic operating system capabilities using both command and graphic interfaces;

3E2.1.8 prepare a technical report on a typical incident occurring at the job site.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE INDUSTRIAL TECHNOLOGIST OCCUPATION.

..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 -

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

Business/Technical Writing III.

JOURNALISM

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE JOURNALISM OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 demonstrate a mastery of English grammar and usage by proofreading and editing materials as assigned;

3E2.1.2 write a news story in the “inverted pyramid” format;

3E2.1.3 use an electronic newsroom system;

3E2.1.4 identify and use the main features/components of a personal computer operating system;

3E2.1.5 employ word processing skills to create an article on the PC including the importation of text and graphics from other documents.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE JOURNALISM OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

LAW ENFORCEMENT

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE LAW ENFORCEMENT OCCUPATION:

..... *approximately 50 hours*

3E2.1.1 use tele-communications;

3E2.1.2 use two-way radios;

3E2.1.3 use law enforcement data base to access information;

3E2.1.4 communicate effectively with clients, public and colleagues.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE LAW ENFORCEMENT OCCUPATION.

..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

LAWYER / PARALEGAL

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.2 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE LAWYER / PARALEGAL OCCUPATION:

..... *approximately 50 hours*

3E2.1.1 define torts and describe various types of tortious conduct, the difference between careless and negligent conduct, what duty of care is owed, and the standards of care expected of professionals;

3E2.1.2 explain the requirements of a valid contract, the necessary conditions for an offer and acceptance, the requirements of consideration in a contract, the principles of promissory estoppel and quantum meruit, and when a seal is required to validate a contract;

3E2.1.3 explain the differences between personal and real property, landlord and tenant relationships for both commercial and residency tenancies, the concept of mortgages and their effect on real property.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE LAWYER / PARALEGAL OCCUPATION.

..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

MVR BODY REPAIRER & PAINTER

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.2 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE MVR BODY REPAIRER & PAINTER OCCUPATION:
..... *approximately 60 hours*

- 3E2.1.1 rough out damaged open & closed panels;
- 3E2.1.2 shrink & repair stretched metal;
- 3E2.1.3 cut, shape & prepare panel patches;
- 3E2.1.4 safely weld / braze / rivet panel patches;
- 3E2.1.5 maintain & use various body and floor jacks to manufacturers' specifications;
- 3E2.1.6 check & adjust the steering geometry of 2 and 4 wheel alignments.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE MVR BODY REPAIRER & PAINTER OCCUPATION:
..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

MACHINING

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE MACHINIST OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 identify, maintain, and use a variety of cutting and non-cutting hand tools;
- 3E2.1.2 select and use taps and dies;
- 3E2.1.3 demonstrate a basic knowledge of layout tools and their uses;
- 3E2.1.4 perform basic layout procedure when laying out from a job print using: one side and one edge as a reference; centre lines as reference; a flat plane as a reference surface; bolt circle calculations to equally space holes on a bold circle;
- 3E2.1.5 select, inspect, and safely operate both pneumatically and electrically driven power tools including drills, reciprocating saws, circular saws, and portable grinders.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE MACHINIST OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

MARINE BIOLOGY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN MARINE BIOLOGY:

..... *approximately 50 hours*

3E2.1.1 design a program to monitor changes in the marine environment that might result from the construction of the bridge between New Brunswick and Prince Edward Island:

- identify what would be measured
- use the appropriate instruments
- identify how frequently measurements would be made
- discuss the tradeoff between sampling intensity and survey area (i.e. when do you sample many stations close together and when do you space the stations widely to cover a large area?)
- define the terms "accuracy" and "precision"

3E2.1.2 design a program to monitor the effects of a pulp and paper mill which discharges its effluent into the estuary of a large river:

- physical effects, chemical effects, and biological effects on fish, plants, and invertebrates

3E2.1.3 describe the biological community that lives in an estuary and how it might be affected by pulp mill effluent.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN MARINE BIOLOGY.

..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

MECHANICAL MAINTENANCE TECHNICIAN

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE MECHANICAL MAINTENANCE TECHNICIAN OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 make accurate measurements with non-precision and precision measuring tools in both metric and imperial systems;
- 3E2.1.2 explain orthographic and isometric projections;
- 3E2.1.3 determine the location, position, and elevation of equipment from a blueprint;
- 3E2.1.4 demonstrate a knowledge of rigging equipment and procedures to ensure safe use of appropriate rigging hardware & equipment;
- 3E2.1.5 explain the properties & uses of various metals;
- 3E2.1.6 frame a wall with a door & window.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE MECHANICAL MAINTENANCE TECHNICIAN OCCUPATION:

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

NURSE / OCCUPATIONAL THERAPIST / SPORTS MEDICINE THERAPIST

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE NURSE / OCCUPATIONAL THERAPIST / SPORTS MEDICINE THERAPIST OCCUPATION:

..... *approximately 50 hours*

- 3E2.1.1 conduct an interview with an elderly person and report significant findings to his/her peers;
- 3E2.1.2 inspect the accommodation of an elderly patient with an eye to improving the personal safety of the patient;
- 3E2.1.3 assist in assessing, planning, giving, and evaluating nursing care to the mother and newborn;
- 3E2.1.4 communicate effectively both orally and in writing with patients, colleagues, and the general public;
- 3E2.1.5 accurately chart subjective and objective symptoms;
- 3E2.1.6 prepare and safely administer medications: oral and subcutaneous, topical, instillation into eye, ear and nose, and insertion into rectum;
- 3E2.1.7 demonstrate an awareness of the health care professional's role in providing spiritual assistance (support, empathy, and non-judgmental understanding) to a patient;
- 3E2.1.8 make observations of the patient's physical, emotional, and psycho-social conditions at the time of admission and accurately record them.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE NURSE / OCCUPATIONAL THERAPIST / SPORTS MEDICINE THERAPIST OCCUPATION.

..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

OFFICE TECHNOLOGY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE FIELD OF OFFICE TECHNOLOGY:

..... *approximately 60 hours*

- 3E2.1.1 demonstrate keyboarding speed and accuracy to 20 words a minute on a two-minute timed writing:
- demonstrate correct position at the keyboard
 - configuration of keyboard and monitor
 - position of body in relation to keyboard and monitor
 - placement of hands over keyboard
 - position of feet and body
 - advantages of comfortable but correct position: fewer errors, less fatigue, less chance of repetitive motion injury
 - strike alphabetic keys by touch
 - home row keys; combinations of upper and lower row keys
 - strike numeric keys by touch
- 3E2.1.2 use standard spacing with punctuation and symbol keys:
- strike common symbol keys efficiently [" ' % \$ () - * @]
 - space correctly before and after various punctuation marks
- 3E2.1.3 use function keys efficiently:
- enter key (or return key)
 - backspace key
 - left and right shift key
 - tab key
 - caps lock
 - margin release (or word wraparound)
 - cursor keys
 - continuous action keys
- 3E2.1.4 make format settings:
- set one-inch margins on top, bottom, and sides of printout
 - change line spacing

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

- change pitch (if applicable)

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OFFICE TECHNOLOGY

(continued)

- 3E2.1.5 demonstrate good interpersonal skills when using telephone equipment:
- transfer
 - conference
 - call hold
 - ring again
 - call forward
 - call pickup
 - speed call
 - call park
 - voice mail messages;
- 3E2.1.6 use facsimile equipment efficiently:
- send
 - broadcast
 - reports
 - copy;
- 3E2.1.7 use photocopy equipment efficiently:
- collator
 - coloured original
 - double sided
 - bypass trays
 - toner loading
 - enlargements/reductions
 - efficient use of materials;
- 3E2.1.8 send and receive electronic messages (E-mail).

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE FIELD OF OFFICE TECHNOLOGY.
..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

PHYSICAL EDUCATION AND RECREATION

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE FIELD OF PHYSICAL EDUCATION AND RECREATION:
..... *approximately 50 hours*

- 3E2.1.1 describe the benefits to the individual and the family unit derived from "active" living;
- 3E2.1.2 make the link between activity, overall well-being, and higher productivity among workers;
- 3E2.1.3 describe physical activity as an element of preventive health care;
- 3E2.1.4 demonstrate a basic understanding of the concepts, terminology, and definitions used in recreation and leisure;
- 3E2.1.5 identify future trends in the field of recreation and leisure;
- 3E2.1.6 identify and respond to current issues in the field of recreation and leisure.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE FIELD OF PHYSICAL EDUCATION AND RECREATION.
..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.
..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

PHARMACY ASSISTANT

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE PHARMACY ASSISTANT OCCUPATION:

..... *approximately 50 hours*

- 3E2.1.1 demonstrate a knowledge of common pharmacy hardware and software applications, including client databases, record keeping functions, cashier functions, etc;
- 3E2.1.2 demonstrate safe handling and storage of drug preparation equipment;
- 3E2.1.3 evaluate a prescription accurately (i.e. drug, generic forms available, schedule, DIN, etc);
- 3E2.1.4 select the proper dosage form, amount, and container for each prescription affixing the appropriate auxiliary labels;
- 3E2.1.5 identify the use of common non-prescription drugs in relation to common health problems.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE PHARMACY ASSISTANT OCCUPATION.

..... *approximately 26 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

PILOT

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE PILOT OCCUPATION:

..... approximately 50 hours

3E2.1.1 use compass, maps, and navigational aids;

3E2.1.2 use radio communication equipment;

3E2.1.3 use aviation safety equipment;

3E2.1.4 demonstrate an understanding of engine, airframe and avionic systems.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE PILOT OCCUPATION.

..... approximately 26 hours

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... approximately 4 hours

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

PROPERTY MAINTENANCE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE PROPERTY MAINTENANCE OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 identify and safely use various equipment required in the property maintenance occupation;

3E2.2.1 communicate effectively with customers and fellow workers.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE PROPERTY MAINTENANCE OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

REFRIGERATION AND AIR CONDITIONING

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE REFRIGERATION AND AIR CONDITIONING OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 establish and maintain good customer relations and demonstrate acceptable business practices;
- 3E2.1.1 select, use and maintain trade specialty tools and equipment;
- 3E2.1.2 apply basic rigging techniques;
- 3E2.1.3 use trade-related computer hardware and software;
- 3E2.1.4 follow established procedures in the use and handling of refrigerant cylinders.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE REFRIGERATION AND AIR CONDITIONING OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

SCIENCES / LABORATORY TECHNOLOGY

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS, AND INFORMATION SYSTEMS EFFECTIVELY IN THE SCIENTIST / LABORATORY TECHNOLOGIST OCCUPATION:

..... *approximately 50 hours*

- 3E2.1.1 sketch the graphs of trigonometric functions;
- 3E2.1.2 perform basic operations with complex numbers and j-operator;
- 3E2.1.3 operate a personal computer and compare hardware from various manufacturers;
- 3E2.1.4 define and explain Nuclear Physics and Radioactivity terms as follows: structure & properties of the nucleus, alpha decay, beta decay, gamma decay, half-life and rate of decay;
- 3E2.1.5 analyze and describe the operation of rectifier type power supplies including various filters and Zener diode voltage regulators;
- 3E2.1.6 use Simpson's rule and the trapezoidal rule to evaluate complex integrals.

3E2.3 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE SCIENTIST / LABORATORY TECHNOLOGIST OCCUPATION:

..... *approximately 26 hours*

3E2.4 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE YAP CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

TELE-SERVICE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE TELE-SERVICE OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 apply various tele-marketing skills to use and build data banks on existing and potential customers;

3E2.1.2 use software to handle incoming and outgoing calls concerning customer 's accounts, company service, and sales.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE TELE-SERVICE OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

VETERINARY MEDICINE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE VETERINARY MEDICINE OCCUPATION:

..... *approximately 60 hours*

3E2.1.1 attend operations and become familiar with instruments, tools, and their uses, maintenance and hygiene.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS AND MAKE DECISIONS IN THE VETERINARY MEDICINE OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

WELDING

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE WELDING OCCUPATION:

..... *approximately 60 hours*

- 3E2.1.1 identify equipment and accessories used with the secondary side of SMAW equipment:
 - cables and attachments
- 3E2.1.2 set up equipment used on the secondary side of SMAW equipment:
 - operate protective and weld cleaning equipment
 - the welding machine
 - types of SMAW machines and their uses
 - sizes and capacity of various types of SMAW equipment
- 3E2.1.3 maintain, in safe operating condition, equipment and accessories applicable to the secondary side of SMAW equipment;
- 3E2.1.4 recognize the characteristics of mild steel and low alloy steel electrodes:
 - steel and steel shapes
- 3E2.1.5 recognize the conditions contributing to deterioration and loss of electrode filler metal;
- 3E2.1.6 adjust SMAW equipment to provide appropriate current range for various electrodes;
- 3E2.1.7 identify electrodes by means of AWS classification system;
- 3E2.1.8 manipulate electrodes to establish and maintain an arc under varying conditions.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

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WELDING

(continued)

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE WELDING OCCUPATION.

..... *approximately 16 hours*

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... *approximately 4 hours*

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT

YOUTH CARE WORKER / CRIMINAL JUSTICE

Upon successful completion of combined theory and work experience, the Youth Apprentice will be able to:

3E2.1 USE TECHNOLOGY, INSTRUMENTS, TOOLS AND INFORMATION SYSTEMS EFFECTIVELY IN THE YOUTH CARE WORKER / CRIMINAL JUSTICE PROFESSION:

..... approximately 50 hours

3E2.1.1 research (using both primary and secondary sources) the topic "History of Juvenile Justice";

3E2.1.2 research (using both primary and secondary sources) the topic "Young Offenders Act";

3E2.1.3 explain the difference between open and closed custody;

3E2.1.4 communicate effectively with clients, fellow workers and the general public.

3E2.2 THINK CRITICALLY AND ACT LOGICALLY TO EVALUATE SITUATIONS, SOLVE PROBLEMS, AND MAKE DECISIONS IN THE YOUTH CARE WORKER / CRIMINAL JUSTICE PROFESSION.

..... approximately 26 hours

3E2.3 PRESENT A COMPREHENSIVE REPORT (ORAL OR WRITTEN) IN WHICH HE/SHE DESCRIBES HIS/HER LEARNING EXPERIENCES IN THE CLASSROOM AND AT THE WORKPLACE.

..... approximately 4 hours

The outline of this report will have been prepared as part of Unit 3E4 - Business/ Technical Writing III.

PHASE 3 - OCCUPATIONAL SKILL DEVELOPMENT



YOUTH APPRENTICESHIP PROGRAM

Special thanks to all employers and educators who have contributed to the curriculum supporting Unit 3E2 - Working in Your Occupational Area III - of New Brunswick's Youth Apprenticeship Program.

NEW BRUNSWICK'S YOUTH APPRENTICESHIP PROGRAM	
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