

C A L E N D A R 1 9 9 3 - 1 9 9 4

ADULT  
SPECIAL  
EDUCATION  
PROGRAMMES

BUSINESS  
AND  
MANAGEMENT  
PROGRAMMES

COLLEGE  
FOUNDATION  
PROGRAMMES

HEALTH  
SCIENCE  
PROGRAMMES

SOCIAL  
SERVICES  
PROGRAMMES

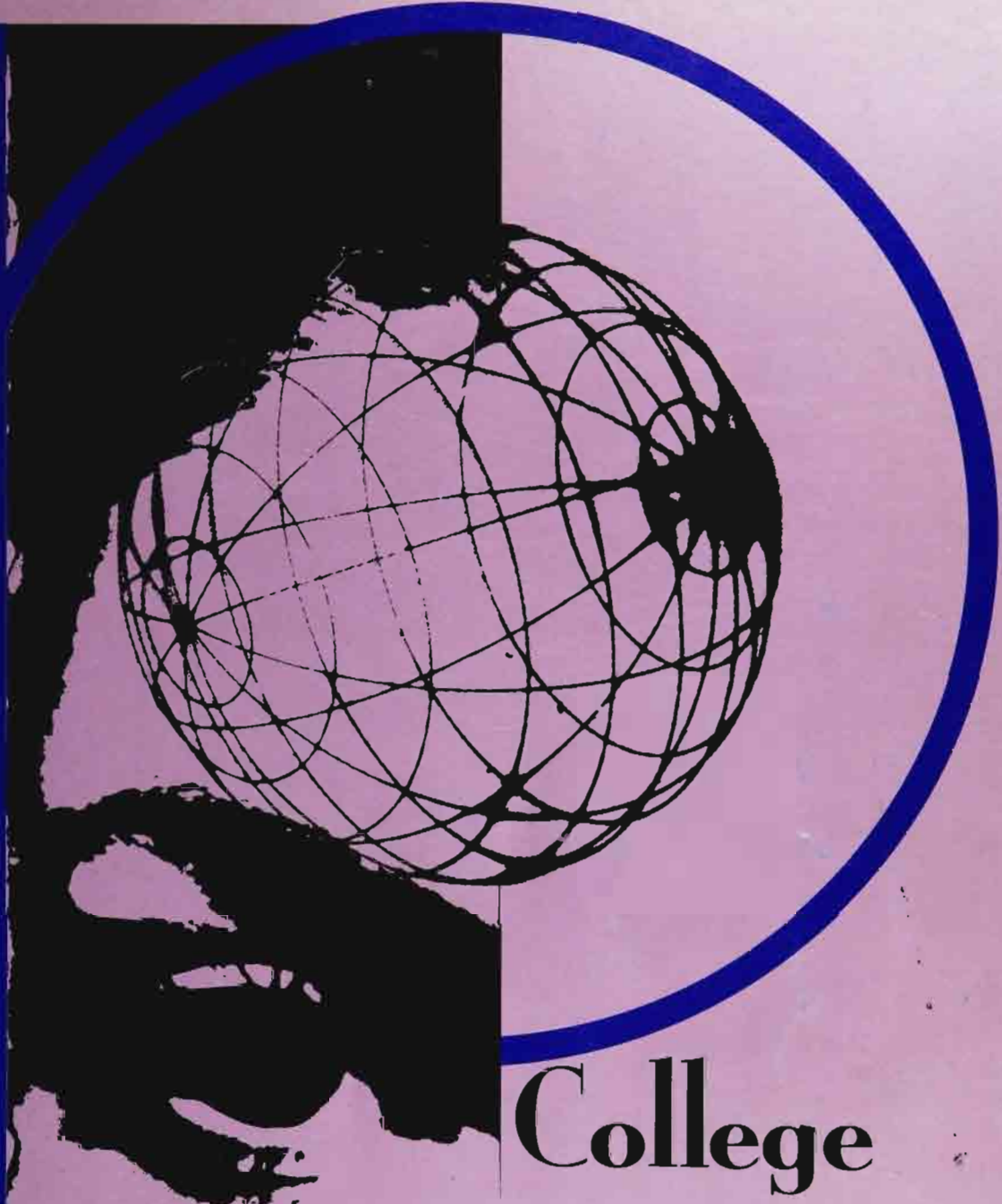
TECHNOLOGY  
PROGRAMMES

TRADES  
PROGRAMMES

UNIVERSITY  
TRANSFER  
PROGRAMMES

25 years

of community partnership 1994



# College of New Caledonia



# ***COLLEGE OF NEW CALEDONIA***

## ***Calendar 1993-1994***

### **Mission**

**"The College of New Caledonia, as a comprehensive community college, provides access to life-long learning and facilitates the achievement of personal and educational goals. We are responsive to the diverse needs of our students, our employees, and the communities in our region. In a dynamic, consultative environment, we deliver quality programmes and promote the success of every student."**

### ***Acknowledgement***

This calendar was jointly produced by staff, faculty and administrators to provide a comprehensive and accurate publication of programmes and services at the College of New Caledonia.



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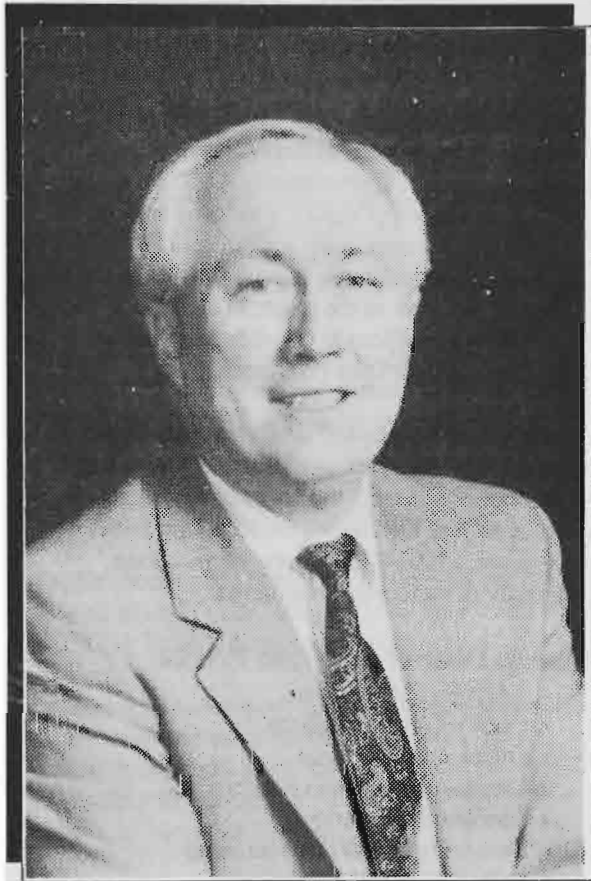
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## DECLARATION OF WAIVER

*The information presented in this Calendar is accurate as of March 1, 1993. The College reserves the right to implement changes as required, including the cancellation or adjustment of programmes and courses, changes in organizational structure, regulations, and services. The College expressly denies responsibility or liability to any person or persons who may suffer loss or may be otherwise adversely affected by any modification to the information herein.*



# INTRODUCTION TO CNC



## PRESIDENT'S MESSAGE

The College of New Caledonia is nearing its 25th year of providing services to the College region. During this time many changes have occurred, some have been welcomed, some have been thrust upon us. The current economic climate in Canada and in our province is requiring the College to re-examine the services we offer and the structures needed to provide these services. The underlying challenge is to change and to do more with less.

In meeting these challenges, the College of New Caledonia has focused on student success as the basic value to steer us through the change process. During these difficult economic times the College community has chosen to focus on achieving an integrated set of student services; instructional, operational or support, aimed at assisting the student to succeed. That guiding principle will challenge every change contemplated.

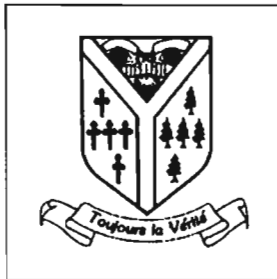
Every constituent group in the College recognizes that our country can no longer remain dependent upon the harvesting of primary resources to sustain our standard of living. The future of our country, our province, and your personal future is dependent upon the development of our human resources. The College will enthusiastically fulfill its role in the development of our human resources by ensuring you be provided with every feasible opportunity to succeed.

Welcome to CNC where your success is our goal.

*Dr. Terence Weninger  
President*

## THE COLLEGE BOARD

- |                            |                               |
|----------------------------|-------------------------------|
| Mr. Robert L. Buxton       | Chairman                      |
| Mr. Rino Fomari            | Vice Chairman - Prince George |
| Mr. Ronald Hawkins         | Vice Chairman - Regions       |
| Mr. John C.A. Morrison     | Prince George                 |
| Dr. J. Galt Wilson         | Prince George                 |
| Mr. Raymond Low            | Burns Lake                    |
| Ms. Carolyn S. Hilbert     | Quesnel                       |
| Ms. Lynne Garner           | Prince George                 |
| Mr. William McLeod         | Vanderhoof                    |
| Mrs. Ingrid (Inky) Whalley | Mackenzie                     |
| Ms. Emma Williams          | Burns Lake                    |



The College of New Caledonia has served the needs of students in British Columbia's Central Interior since 1969. As one of fourteen community colleges in the province, CNC now consists of five campuses, serving a region

spanning 117,500 square kilometres with a population of approximately 145,000.

The past twenty years have seen the College grow from a fledgling institution housed in a portable building beside Prince George Senior Secondary School, to a large, modern facility with campuses in Prince George, Burns Lake, Mackenzie, Quesnel and Vanderhoof. Dedicated to the pursuit of excellence in education, and to the provision of an intellectually challenging environment, CNC offers a wide range of university credit, technical, vocational and general interest programmes. Educational opportunities for the region are further enhanced with the operation of CNC's Co-operative Education Programme, the Enterprise Development Centre.

### PRINCE GEORGE

The main campus, located in Prince George, offers the full range of College programs. For further information, contact:

**Office of Admissions and Registration  
College of New Caledonia  
3330-22nd Ave.  
Prince George, B.C. V2N 1P8  
Tel: 562-2131 Fax: 561-5816**

Regional campus calendars are available upon request from the respective campus office.

## REGIONAL CAMPUS PROFILES

### LAKES DISTRICT

The Lakes District campus, established in 1976, is centred in Burns Lake and serves a large geographical area of approximately 4,000 sq. miles with a population of 6,500. Programs and courses are offered throughout the region from Ft. Babine in the extreme northwest section to the boundary of Tweedsmuir Park in the south. In addition to Burns Lake there are offices in Granisle and the area south of Francois Lake (Southside).

The campus designs and delivers programs in conjunction with local agencies and community organizations to meet the needs of target groups within each of the Lakes District communities. There are 2,500 - 3,000 course registrations annually in various program areas.

#### Lakes District Program Profile

- Adult Basic Education
- Family Centred Program
- Office Administration
- Career Advancement Program
- Business Management
- University Credit (1st year Arts)
- Early Childhood Education
- Special Funding
- Vocational Courses
- General Interest

For further information, contact:

**Lakes District Campus  
Lakes Centre, HWY 16  
Box 5000, Burns Lake, B.C. VOJ 1E0  
Tel: 692-3175 Fax: 692-3809**

## **MACKENZIE**

The Mackenzie Campus of the College of New Caledonia serves a population of approximately 5,800 providing educational opportunities in Mackenzie, McLeod Lake, Tsay Keh, and Fort Ware.

The campus in Mackenzie is located on the second floor of a retail mall and boasts five classrooms of varying size, a 12-station computer lab, library, and a student lounge.

The Mackenzie Campus has two full-time programs: Office Administration and Adult Basic Education. The Office Administration program enrolls 12 individuals and offers training in all aspects of clerical work with emphasis on communications and on microcomputer applications.

English, math and science to the intermediate level as well as math to the advance level are offered in our Adult Basic Education program.

With special funding we are able to work cooperatively with the Native communities and offer a combination ABE, life management, and job readiness training program to both the Tsay Keh Dene and Fort Ware residents.

We offer a variety of University Transfer, Business Management, Vocational, and General Interest courses in response to requests from the community as well as industrial training for the local mills.

The Business Administration Certificate program and the Special Education Assistant certificate program are offered on a part-time evening basis.

The strength of our operation is the ability to develop and deliver programs to specific target audiences as identified by local agencies and community groups.

For further information, contact:

**Mackenzie Campus**  
**Evergreen Mall**  
**Box 2110, Mackenzie, B.C. VOJ 2C0**  
**Tel: 997-4333 Fax: 997-3779**

## **NECHAKO**

College of New Caledonia-Nechako is committed to providing educational services to members of the public in the communities where they live.

These communities include

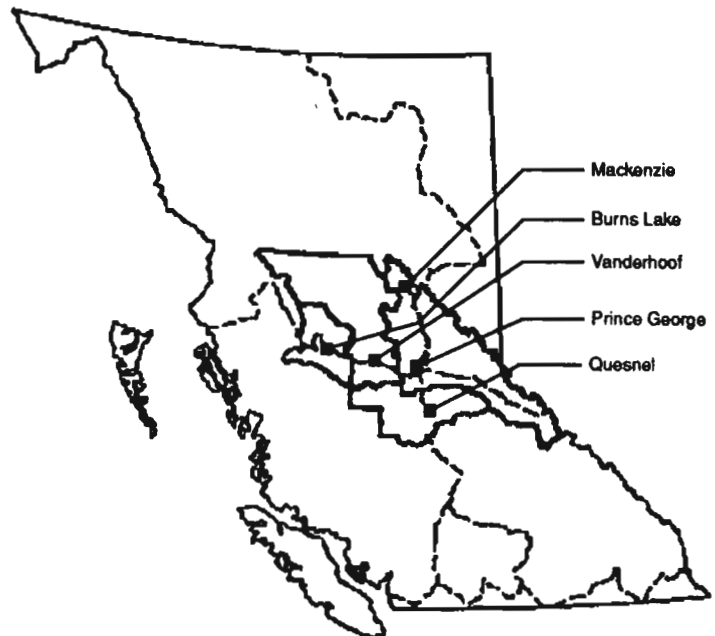
Vanderhoof  
Fort Fraser  
Fraser Lake  
Fort St. James  
Tache  
Portage  
Takla

with a population base of approximately 15,000.

The College of New Caledonia-Nechako offers a variety of academic, technical, vocational, professional development and general interest courses. CNC-Nechako also offers career counselling workshops. For further information, contact:

**Nechako Campus**  
**RR#2, Vanderhoof, B.C. VOJ 3A0**  
**Tel: 567-9291 Fax: 567-9584**

**College of New Caledonia Campuses**



### QUESNEL

The Quesnel campus of the College of New Caledonia serves a population of approximately 30,000+ in the Quesnel, Wells, Nazko/Kluskus and Alexandria communities. The campus is located in downtown Quesnel in the Rigsby Building and includes twelve classrooms (including a modern 16-station computer lab), library and administrative offices in the three-storey building. A Diploma Nursing practice lab is located at the G.R. Baker hospital and various courses are run at other locations as required.

The Quesnel Campus offers six full-time programmes on an annual regular basis and other full and part-time programmes on a community request basis. Full-time programmes include:

- University Transfer Arts - first year
- Diploma Nursing
- Social Services Foundation Certificate
- Office Administration
- Adult Basic Education (VALT, Levels 010/020, Level 030, Levels 045/050)
- Community Access Programme (ASE)

Part-time credit and non-credit courses are also offered, depending upon community interest, in many CNC programmes as well as in the management studies/CIS, trades, computer skills, and community development areas.

For further information on courses at the Quesnel Campus, request a copy of the CNC Quesnel calendar; for CNC credit courses offered in Quesnel, programme/course information in this calendar applies as well to the Quesnel Campus.

For further information, contact:

**Quesnel Campus**  
**488 McLean Street**  
**Quesnel, B.C. V2J 2P2**  
**Tel: 992-3906 Fax: 992-7876**

### CONTINUING EDUCATION

In its commitment to education as a lifelong process, the College offers a broad spectrum of career oriented and general interest Continuing Education courses and programmes geared to adult learners. Programmes are developed on an ongoing basis, and are advertised in the local media throughout the year, as well as in the bi-annual fall and winter flyers printed in the local newspaper or through regional advertising.

The College welcomes ideas and suggestions regarding new programmes and courses, or possible improvements and enhancements to existing programmes. Further information regarding courses offered, and registration procedures may be obtained by contacting:

**Office of Admissions and Registration**  
**College of New Caledonia**  
**3330-22nd Avenue**  
**Prince George, B.C. V2N 1P8**  
**TEL: 561-5801 FAX: 561-5816**

or any of the regional campuses.

For specific information relating to Continuing Education - Business programmes, contact the Enterprise Development Centre at 563-9588. Information regarding Continuing Education - Trades programmes may be obtained by contacting the Trades Department at 561-5843 and information regarding Continuing Education - Technologies programmes may be obtained by contacting the Division of Technologies at 562-2131 Loc.344.

## **ENTERPRISE DEVELOPMENT CENTRE**

The Enterprise Development Centre delivers training to assist local businesses and their employees. The Centre provides business oriented training including computer courses, professional and personal development courses and management courses. All levels of expertise are served from those encountering the computer for the very first time to the seasoned executive looking for a fresh approach to strategic planning. For example, "Management Skills for Supervisors", a provincially certified course offered in three four day segments, is scheduled on a regular basis. Also, the Centre will custom design, develop and delivery training to address specific needs.

Further information may be obtained by contacting:

**The Enterprise Development Centre  
#125 - 1577 - 7th Ave.  
Prince George, B.C. V2L 3P5  
TEL: 563-9588**

## **CO-OPERATIVE EDUCATION**

Co-operative Education integrates academic and on-campus programmes with career oriented paid work experience. A student who graduates from a co-operative education programme is much better prepared to enter the work force, benefiting from career related experience, employment contacts and references. Currently, the following pro-grammes offer students the opportunity to integrate work experience with their academic studies:

- Accounting and Finance Diploma
- Computer Information Systems Diploma
- Marketing Management Diploma
- Co-operative Advanced Apprenticeship Training
  - Automotive Mechanical Repair
  - Heavy Duty Mechanical Repair
- Electronics Engineering Technology Diploma
- Engineering Graphics and Design Diploma
- Social Services Training Programme

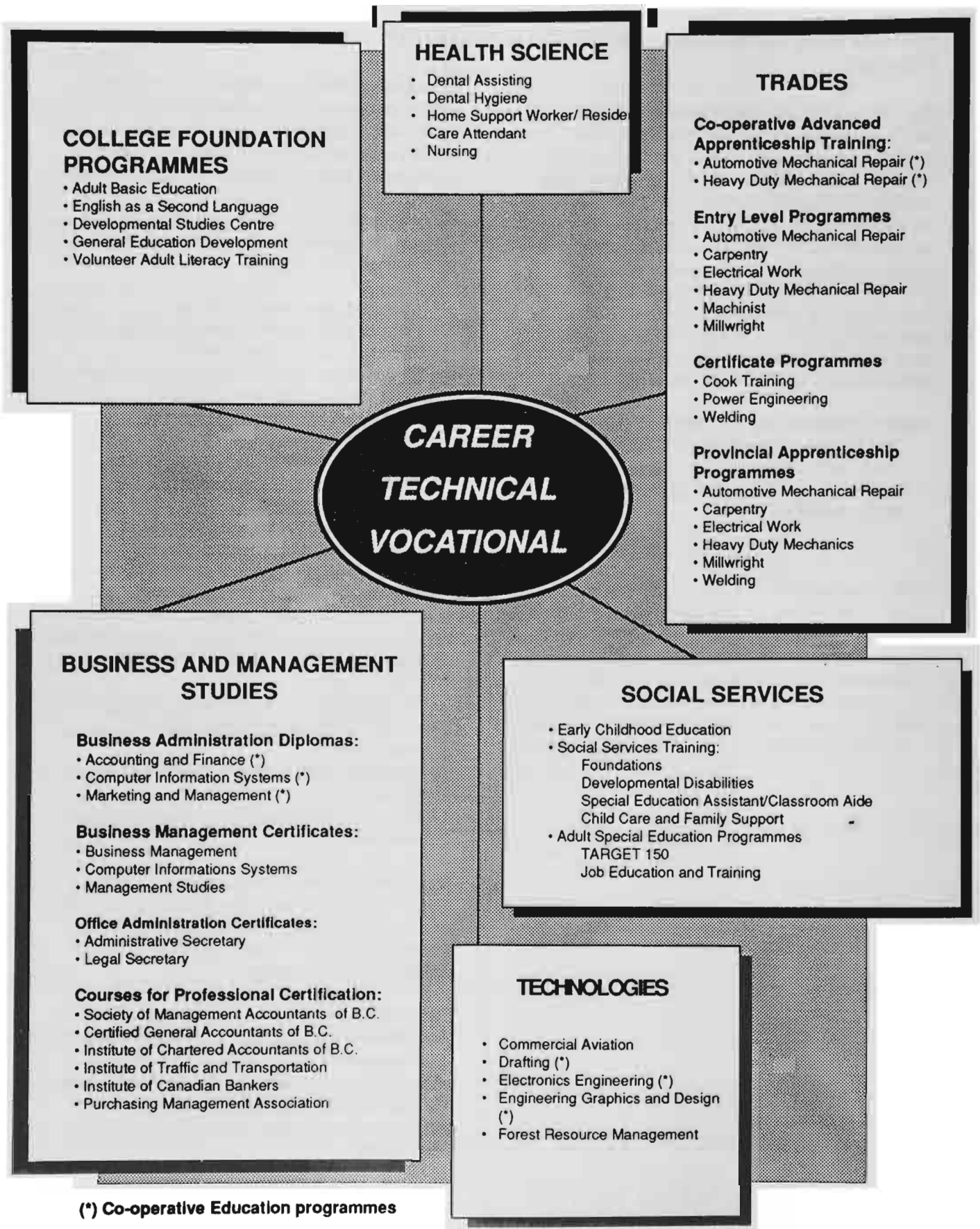
All work placement opportunities are subject to College approval, and are monitored by the Co-operative Education programme staff. Students must apply for the Co-operative Education Option and must be hired by a participating employer. Students registered in a Co-operative Education programme include the following work terms in their programmes:

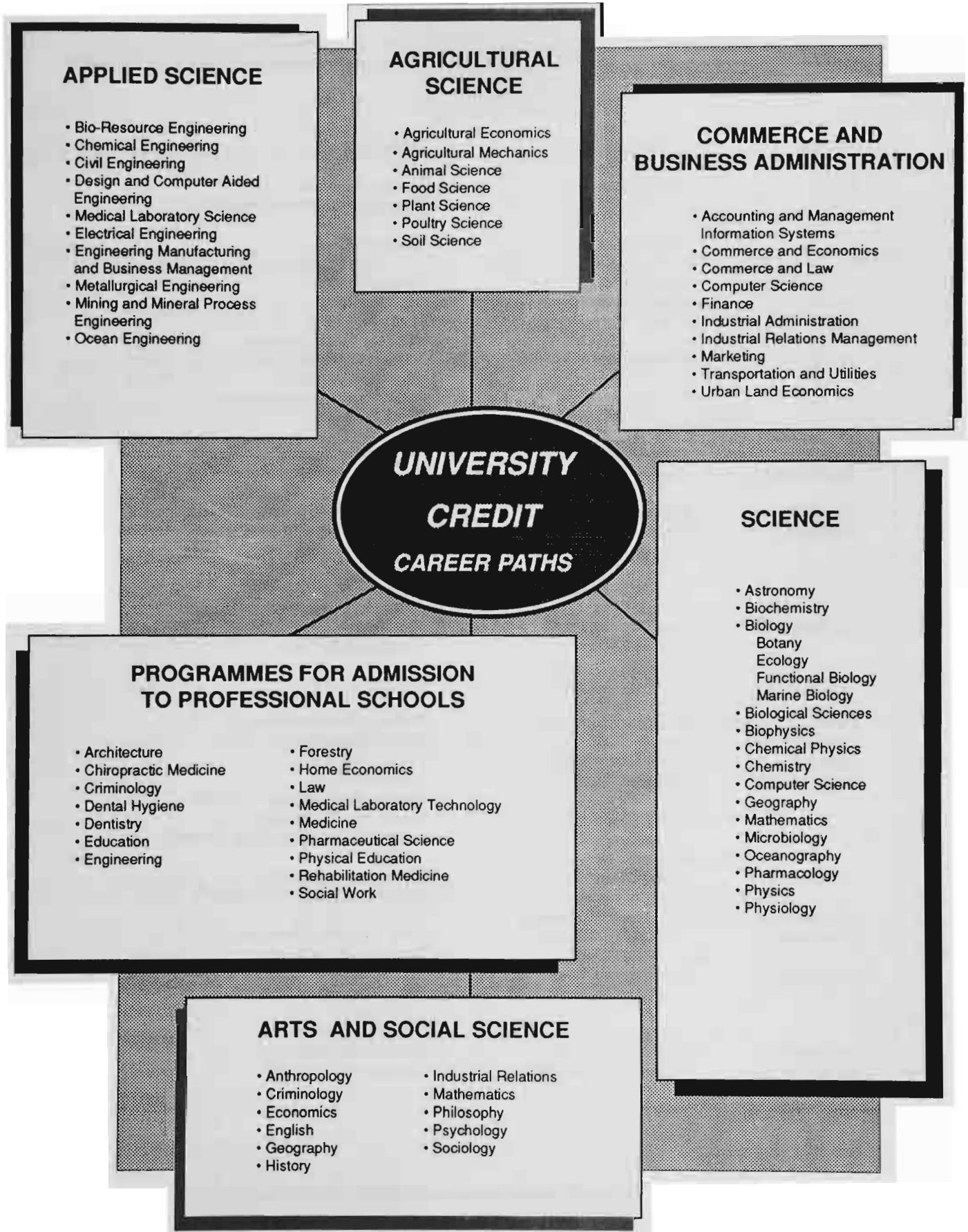
- Co-op 150 First work term-all Co-op programmes;
- Co-op 250 Second work term-all Co-op programmes;
- Co-op 298 Third work term-Technology and Business;
- Co-op 299 Fourth work term - Optional and as scheduled.

Work terms typically consist of thirteen to sixteen weeks of full-time employment. The number of work terms varies depending on the programme of study. Refer to Co-operative Work Term Schedules for an outline of each programme.

The Co-operative Education office is staffed on a year round basis to offer assistance to students participating in the programme. Employment skills courses are offered to prepare students for their work placements. The Applied Employment Skills course provides training in resume writing, job searching and interviewing.







# A

## ACADEMIC SCHEDULE

### 1993

May 24	Victoria Day	• College Closed
June 7	Classes Start	• Nursing Diploma - Summer Preceptorship (Prince George)
July 1	Canada Day	• College Closed
August 2	B.C. Day	• College Closed
August 3	Classes Start	• Cook Training
August 18	Classes Start	• Home Support / Resident Care Attendant
August 30	Classes Start	• Nursing Diploma - Fall Preceptorship (P.G.)
		• Forest Resource Technology (First Year Only)
September 1	Orientation	• Dental Programmes
September 1	Classes Start	• Adult Basic Education
		• Early Childhood Education
September 6	Labour Day	• College Closed
September 7	Classes Start and Orientation	• Semester Programmes
		• Trimester Programmes
		• Social Service Foundations
		• TARGET & JET
		• Office Administration (1st)
September 23	Last Day of Classes	• Nursing Diploma - Summer Preceptorship (P.G.)
October 11	Thanksgiving Day	• College Closed
November 5	Last Day of Classes	• Office Administration (1st)
November 10	Classes Start	• Office Administration (2nd)
November 11	Remembrance Day	• College Closed
November 29	Trimester Break	• Dental Hygiene
		• Engineering Graphics & Design
		• Electronics Technology
		• Nursing (Prince George & Quesnel)
December 6	Classes Start	• Trimester Programmes
		• Nursing - Quesnel (Trimester I)
December 7	Fall Awards Ceremony	
December 10	Last Day of Classes	• Early Childhood Education
		• Semester Programmes
December 17	Last Day of Classes	• Social Services Foundations
		• Home Support Worker / Resident Care Attendant
		• Nursing - Quesnel
December 18	Last Day of Exams	• Semester Programmes
December 20	Christmas Break Starts	• Majority of Programs

**Note:** (\*\* Nursing break to coincide with School District No.57 Christmas break\*\*)

**1994**

January 3 January 4	New Year's Stat Classes Resume	<ul style="list-style-type: none"> <li>• College Closed</li> <li>• Trimester Programmes</li> <li>• Nursing Diploma</li> <li>• Preceptorship (Quesnel)</li> <li>• Office Administration</li> <li>• Early Childhood Education</li> <li>• TARGET &amp; JET</li> </ul>
January 5 January 10	Classes Start Classes Start	<ul style="list-style-type: none"> <li>• Home Support Worker/Resident Care Attendant</li> <li>• Semester Programmes</li> <li>• Adult Basic Education</li> <li>• Social Services Foundations</li> </ul>
January 24 January 27 March 7	Last Day of Classes Classes Start Study Break Starts (March 7 - 11)	<ul style="list-style-type: none"> <li>• Office Administration (2nd)</li> <li>• Office Administration (3rd)</li> <li>• Trimester Programmes</li> <li>• Semester Programmes</li> <li>• Early Childhood Education</li> <li>• TARGET &amp; JET</li> </ul>
<b>Note:</b>	(**Dental Assisting Break to Coincide With S.D. No.57 Spring Break**)	
March 14 March 24 March 29	Classes Start Last Day of Classes Classes Start	<ul style="list-style-type: none"> <li>• Trimester Programmes</li> <li>• Office Administration (3rd)</li> <li>• Office Administration (4th)</li> </ul>
April 1 April 4 April 5 April 20	Good Friday Easter Monday Spring Awards Ceremony Last Day of Classes	<ul style="list-style-type: none"> <li>• College Closed</li> <li>• College Closed</li> </ul>
April 22	Last Day of Classes	<ul style="list-style-type: none"> <li>• Semester Programmes</li> <li>• Social Services Foundations</li> <li>• Nursing Diploma -</li> <li>• Preceptorship (Quesnel)</li> <li>• Forest Resource Technology</li> </ul>
April 29	Last Day of Exams	<ul style="list-style-type: none"> <li>• Semester Programmes</li> <li>• Social Services Foundations</li> </ul>
May 6	Last Day of Classes	<ul style="list-style-type: none"> <li>• Home Support Worker /</li> <li>• Resident Care Worker</li> </ul>
May 20	Last Day of Classes	<ul style="list-style-type: none"> <li>• Cook Training</li> <li>• Early Childhood Education</li> </ul>
May 23 May 27	Victoria Day Last Day of Classes and Exams	<ul style="list-style-type: none"> <li>• College Closed</li> <li>• Electronics Engineering Technology</li> <li>• Engineering Graphics &amp; Design</li> <li>• TARGET &amp; JET</li> <li>• Office Administration</li> </ul>
June 3	Last Day of Classes and Exams	<ul style="list-style-type: none"> <li>• Dental Hygiene</li> </ul>
June 24	Last Day of Classes and Exams	<ul style="list-style-type: none"> <li>• Nursing</li> <li>• Dental Assisting</li> </ul>

## ACADEMIC SCHEDULE

### Semester Programmes

- Business Administration
- Commercial Aviation
- Forestry
- Social Services
- University Transfer

Orientation	Fall Semester	Exams	Christmas Break	Spring Semester	Exams	Study Break
Sept. 7/93	Sept. 7 - Dec. 10/93	Dec. 13 - 18, 1993	Dec. 20/93 - Jan. 9/94	Jan. 10/94 - April 20/94	Apr. 21 - Apr. 29/94	Mar. 7 - 11/94

### Trimester Programmes

- Dental Hygiene
- Drafting
- Electronics
- Engineering Graphics & Design
- Nursing

Orientation	Fall Trimester	Trimester Break	Winter Trimester	Christmas Break	Trimester Break	Spring Trimester
Sept. 7/93	Sept. 7 - Nov. 26/93	Nov. 29 - Dec. 5/93	Dec. 6/93 - Mar. 4/94	Dec. 20/93 - Jan. 4/94	Mar. 7 - Mar. 11/94	Mar. 14 - May 27/94 Nursing & Dental Hygiene Mar. 14 - June 3/94

### Adult Basic Education and Vocational Programmes

Programme	Intake	Orientation	Start Date	Christmas Break	Study Break	End Date
Adult Basic Education (Day Time Sections)	Fall (#1)	Sept. 7/93	Sept. 1/93	Dec. 23/93 - Jan. 4/94	N/A	Jan. 7/94
	Spring (#2)	Jan. 10/94	Jan. 10/94	N/A	Mar. 7-11/94	May 16/94
Dental Assisting	Fall	Sept. 1, 2, 3 & 7/93	Sept. 7/93	Dec. 10/93 - Jan. 3/94	TBA	June 24/94
Home Care Support Worker/ Resident Care Attendant	Fall #1	Aug 18 & Sept 7/93	Aug. 18/93	N/A	N/A	Dec. 17/93
	Spring #2	Jan. 5/94	Jan. 5/94	N/A	Mar. 7 - 11/94	May 6/94
Target & JET	Fall	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	Mar 7 - 11/94	May 27/94

**Adult Basic Education and Vocational Programmes (con't.)**

<b>Programme</b>	<b>Intake</b>	<b>Orientation</b>	<b>Start Date</b>	<b>Christmas Break</b>	<b>Study Break</b>	<b>End Date</b>
Early Childhood Education	Fall	Sept. 1/93	Sept 1/93	Dec. 20/93 - Jan. 3/94	Mar. 7 - 11/94	May 20/94
Automotive Entry Level Training	Fall #1	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	N/A	Feb. 4/94
	Spring #2	Feb. 14/94	Feb. 14/94	N/A	N/A	July 1/94
Heavy Duty Entry Level Training	Fall #1	Aug. 2/93	Aug.2/93	Dec. 20/93 - Jan. 3/94	N/A	Feb. 11/94
	Spring #2	Nov.22/93	Nov.22/93	Dec. 20/93 Jan. 3/94	N/A	Mar.25/94
Cook Training	Fall	Sept. 7/93	Aug. 3/93	Dec. 20/93 - Jan. 3/94	Mar. 7 - 11/94	May 20/94
Carpentry Entry Level Training	Fall #1	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	N/A	Feb. 11/94
	Spring #2	Jan. 17/94	Jan. 17/94	N/A	N/A	June 10/94
Electrical Entry Level Training	Fall #1	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	N/A	Feb. 4/94
	Spring #2	Feb. 14/94	Feb. 14/94	N/A	N/A	July 1/94
Machinist Entry Level Training	Fall #1	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	N/A	Feb. 18 /94
	Spring #2	Feb. 28/94	Feb. 28/94	N/A	N/A	July 29/94
Millwright Entry Level Training	Fall #1	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	N/A	Feb. 18/94
	Spring #2	Feb. 28/94	Feb. 28/94	N/A	N/A	July 29/94
Power Engineering	Fall	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	N/A	May 27/94
Welding	Monthly	Sept. 7/93	Each Month	Dec. 20/93 - Jan. 3/94	Mar. 7 - 11/94	4 - 6 months
Office Administration	Fall	Sept. 7/93	Sept. 7/93	Dec. 20/93 - Jan. 3/94	Nov. 6-9/93 Mar. 25-28/94	May 27/94

# A

# DMISSIONS RECORDS AND REGISTRATION

## ADMISSION REQUIREMENTS

The College of New Caledonia, as a comprehensive community college, provides access to life-long learning.

Eligibility for admission is based on satisfying citizenship, age and academic requirements. Specific programme or course prerequisite requirements must be met in addition to any general admission requirements. In cases where applicants may not meet the specific admission requirements for a desired programme, the college offers a broad range of developmental programmes which do lead to the qualifications necessary for specific programme entry.

### 1. General Admission

In all cases, specific programme admission requirements or course prerequisites take precedence over general admission requirements and should be checked at the time of application.

While many programmes at the College do not require Grade 12 or equivalent, and students are encouraged to examine specific programme or course requirements for more information, the following qualifications are generally accepted where Grade 12 or equivalent is listed as a requirement for admission:

- a) students who have graduated from a B.C. Secondary School;
- b) students who have completed the GED meet the general admission requirements for Grade 12 or equivalent, but are subject to specific programme or course requirements;
- c) students who have completed the Adult Basic Education (ABE) Advanced Certificate meet general admission requirements for Grade 12 or equivalent, but are subject to specific programme or course requirements. To qualify for this admission status, students must have completed English 045; Math 044 or 045; one of Chemistry 045, Biology 045 or Physics 045; and one other course such as an additional Science at the 045 level, Computer Studies 045, or Canadian Studies 045;
- d) students who have completed the Senior Alternate Education (SAE) with English 12 and who are 18 years and over meet general admission requirements for Grade 12 or equivalent, but are subject to specific programme or course requirements. To qualify for this admission status, students must have completed English 11; English 12; Social Studies 11; Consumer Education 12; one of Mathematics 11, Introductory Mathematics 11 or Mathematics 11A; and one of Biology 11, Chemistry 11, Physics 11, Earth Science 11 or Science and Technology 11.

At this time, Senior Alternate Education has not been articulated for specific programme requirements admission. Students requesting admission using Senior Alternate Education must receive specific programme approval.

### 2. Admission Status - Geographic

Residents of School Districts 28 (Quesnel), 55 (Burns Lake), 56 (Nechako), and 57 (Prince George) are classified as in-region students and are given admission priority over other applicants. To qualify as an in-region student, a person must satisfy one of the following requirements:

- a) be 19 years of age or over and have resided within the boundaries of one of the above School Districts for at least three months prior to the commencement of the programme to which admission is sought, or
- b) be under 19 years of age at the commencement of the programme to which admission is sought, and be a dependent of parents or legal guardians who reside within the boundaries of the above School Districts, or
- c) be the owner of real property within the boundaries of the above School Districts.

Applicants not able to qualify as in-region are classified as out-of-region. The responsibility for registering as either in-region or out-of-region rests with the applicant. A student who falsifies resident status may be required to withdraw from the College.

### 3. Citizenship and Immigration Requirements

The College of New Caledonia accepts applications for admission from prospective students only if they:

- a) are citizens of Canada, or
- b) hold status granted by Employment and Immigration Canada as Permanent Residents (landed immigrants), proof of which must be submitted, or
- c) hold a valid Student Authorization issued by Immigration Canada, proof of which must be submitted. Students applying under this section are specifically referred to the sections of this calendar dealing with International Students and International Student Fees.

### 4. Age Requirements

In general, students must be at least 19 years of age or turn 19 during their first year of study. Specific programme requirements, such as in the case of Adult Basic Education, take precedence over the general age requirement. Persons under the age of 18 years can be admitted and are referred to the Special Admission section of this calendar.

### 5. International Students

International student applicants may apply but must have local sponsors or sponsoring agencies who will be responsible for the full cost of their education. Applications should be submitted early to allow for reference verification, transcript evaluation, and correspondence with immigration authorities. Applicants are cautioned that all applications and supporting documentation must be in English or notarized translations to be considered.

In keeping with Ministry of Advanced Education, Training and Technology policy, a differential fee structure designed to cover all instructional costs is applied in setting fees for international applicants. Students applying as International Students are specifically referred to the section of this calendar dealing with International Student Fees.

International student applicants will not normally be accepted into limited enrollment programmes, if in doing so, access is denied to qualified Canadian citizens or landed immigrants. International Students are not eligible for publicly funded student aid programmes.

Applicants whose first language is not English will be required to provide proof of proficiency in English sufficient to pursue a programme of study. Normally, the English and Math Achievement Test (EMAT) is used when language proficiency must be determined. Applicants should refer to specific programme or course requirements for more information.

### 6. Special Admission

In addition to meeting General Admission requirements, many students may gain entry to the College through other avenues:

- a) students without Grade 12 who are deficient in no more than two courses for B.C. Secondary School graduation, but do have English 12, English 045 or equivalent may be admitted as having Grade 12 or equivalent, but are subject to specific programme or course requirements.
- b) students who are over 19 years of age on the first day of the term for which admission is sought and have been out of the regular school system for at least one year and whose maturity, ability and experience demonstrate they will be able to succeed in their courses may gain entry as Mature Students. Programme prerequisites and their equivalencies will be examined on an individual basis.
- c) students who are under 18 years of age may be granted special admission to a programme or course upon the written recommendation of a College of New Caledonia Counsellor and upon the authorization of the specific programme Division Chair. Such students will generally have an outstanding academic record and will complete Grade 11 in the year in which they are applying for admission. They will also require the authorization of the appropriate Secondary School Principal and will be admitted as Early Entry students. The College of New Caledonia reserves the right to determine whether an under-aged student will be permitted to register.
- d) students without specific programme or course prerequisites may be granted permission to enter a programme or course upon the written recommendation of a College of New Caledonia Counsellor and the Instructor with the signed authorization of the appropriate Division Chair.

## APPLICATION PROCEDURES

### 1. New Students

- a) Obtain an Application for Admission form by writing to or contacting:

**Office of Admissions and Registration**  
College of New Caledonia  
3330 - 22nd Avenue  
Prince George, B.C.  
V2N 1P8  
TEL: (604) 562-2131 or (604) 561-5800

Application forms may also be obtained at any of the College's Regional Centres.

- b) Submit the completed application as early as possible (seats are limited in many programmes) along with the \$15.00 application fee and official Secondary or Post-Secondary school transcripts. Secondary school students may initially submit a Progress Report of Secondary School Subjects, and subsequently complete their application by forwarding official transcripts as soon as they become available. Applicants are not officially accepted or placed on programme waiting lists until transcripts or secondary school status statements are received by the College.
- c) Advise the admissions office of any change of name, address, or telephone number. Unless requested otherwise, all correspondence will be sent to the applicant's permanent home address.
- d) Applicants will be notified by mail of their admission to the College. Detailed registration information, including the date and time for registration, will be specified in the Permission to Register letter.

### 2. Former Students

Students returning without interruption to their programme of study need not complete an application form. They will automatically be issued a Permission to Register letter. Students returning after an interruption of one or more semesters or trimesters must complete an application, however, no application fee is levied.

### 3. Documents Required

Applicants are required to submit the following documents with their applications.

- a) Transcripts  
Official transcripts for all secondary and/or post-secondary education or training must be submitted with the Application for Admission.

Applicants from outside Canada, and whose documents are not in English, must provide a notarized translation.

Applicants who are currently attending Secondary School may initially submit a progress report of



## ADMISSIONS RECORDS AND REGISTRATION

Secondary School subjects at the mid-point of the final semester or term and subsequently complete their application by forwarding official transcripts as soon as they become available.

Applicants who have completed post-secondary courses in other institutions and who request Advance Credit must submit an official (i.e. signed and sealed) transcript for evaluation.

Applications will not be considered complete until all transcripts are received. Students who are unable to submit transcripts should contact Admissions, the Registrar's Office, or the College of New Caledonia Counselling Department.

- b) Documents for Specific Programmes  
Some programmes have specific document requirements and should be checked at the time of application.

### ADMISSION PROCEDURES

After applications are finalized, eligible applicants will be processed for admission. For most programmes starting in the Fall, the admissions procedure normally begins May 1st. (For additional information refer to specific programme descriptions).

#### Limited Enrollment Programmes

For limited capacity College programmes, students may be admitted on a selective basis. Eligible applicants must meet specific educational and general programme prerequisites and are evaluated to assess their potential for success in the programme. Applicants to over-subscribed programmes will be accepted based on the Student Selection Procedures described below.

#### Registration Procedures

Applicants who have been accepted for admission to the College must register on the date and at the time specified in the Permission to Register letter. Students are advised to select their courses in consultation with a College Counsellor prior to the registration period. The registration is complete once all fees have been paid. Students who obtain sponsorship from an outside agency must present written confirmation of sponsorship prior to registration.

- a) Late Registration  
Students who do not register at the time specified in their notice of admission must register by the tenth instructional day following the beginning of classes. A late registration fee of \$10.00 per course (to a maximum of \$50.00) will be levied. Students with extenuating circumstances are advised to contact the Registrar.
- b) Change in Registration  
Students wanting to modify their registered courses are advised to consult with a College Counsellor. All course and section changes require College approval and will only be permitted during the

ADD/DROP periods specified at the time of registration.

- c) Identification Cards  
Student identification cards are issued by the Admissions Office upon full payment of fees. Replacement cards can be obtained from the Office of Admissions and Registration for a fee of \$5.00.

#### Student Selection Procedures

On April 30th, all programmes (with the exception of DENTAL HYGIENE and EARLY CHILDHOOD EDUCATION) will be reviewed and at this date, it will be established whether a programme is over- or under-subscribed. Admissions procedures for Dental Hygiene and Early Childhood Education are noted under section 3 and 4 of this policy.

1. For limited enrollment programmes that are not over-subscribed, selections will be made as follows:
  - a) Applicants who meet admission requirements will be accepted on April 30th or thereafter until the programme is fully subscribed.
  - b) Where possible, registrations will be conducted by mail.
  - c) All applicants must demonstrate that they have completed or are in the process of completing admission requirements for the programme for which they applied. Applicants who have not completed the admission requirements or have not demonstrated that they are in the process of completing the necessary requirements will not be considered.
  - d) All applicants who are selected in the initial acceptance process and who are sent a notice of acceptance, will be given 30 days to submit a \$100.00 non-refundable deposit. If the deposit is not received in the Registrar's Office within 30 days, the applicant will lose their seat.
  - e) All remaining fees to be paid not later than the normal programme registration date.
  - f) All acceptances are conditional pending proof that the admission criteria have been satisfied.
2. For limited enrollment programmes that are deemed to be over-subscribed, selections will be made as follows:
  - a) On May 1st, 50% of all acceptable applicants for these programmes will be selected by the appropriate Division Chair and/or his or her selection committee. Selection criteria for most programmes have been published under the programme area in this calendar. Selection criteria are available at the divisional level and students are encouraged to review these criteria and respond to them if they wish to increase their chances of acceptance.
  - b) Following those selections, the admission of the remaining 50% of acceptable applicants will be determined randomly. More specifically, all remaining, acceptable applicants will be identified by number. The Admissions Clerk, in consultation with the Registrar, will be responsible for randomly

- selecting the remainder of the applicants.
- c) All applicants must demonstrate that they have completed or are in the process of completing admission requirements for the programme for which they have applied. Applicants who have not completed the admission requirements or have not demonstrated that they are in the process of completing the necessary requirements will not be considered.
  - d) All applicants who are selected in the initial acceptance process and who are sent a notice of acceptance will have 30 days to submit a \$100.00 non-refundable deposit. If the deposit is not received in the Registrar's Office within 30 days, the applicant will lose their seat.
  - e) All remaining fees to be paid not later than the normal programme registration date.
  - f) All acceptances are conditional pending proof that admission criteria have been satisfied.
3. For the Dental Hygiene programme, the following procedure will apply based on approval passed by the CNC Board:
- a) On June 1st, all eligible applicants for this programme will be selected by the appropriate Division Chair and/or his or her selection committee. Selection criteria are published under the Dental Hygiene section of this calendar. Students are encouraged to review these criteria and respond to them if they wish to increase their chances of acceptance.
  - b) All eligible applicants must demonstrate that they have completed admission requirements for the programme. Applicants who have not completed the admission requirements and who have not submitted official transcripts on or before May 31st will not be considered.
  - c) All applicants who are selected in the initial acceptance process and who are sent a notice of acceptance, will be given 30 days to submit a \$100.00 non-refundable deposit. If the deposit is not received in the Registrar's Office within 30 days, the applicant will lose their seat.
  - d) All remaining fees to be paid not later than the normal programme registration date.
  - e) All acceptances are conditional pending proof that admission criteria have been satisfied.
4. For the Early Childhood Education Programme, the following procedure will apply based on approval passed by the CNC Board:
- a) On May 1st, all eligible applicants for this programme will be selected by the appropriate Division Chair and/or his or her selection committee. Selection criteria are published under the Early Childhood Education section of this calendar. Students are encouraged to review these criteria and respond to them if they wish to increase their chances of acceptance.

- b) All eligible applicants must demonstrate that they have completed or are in the process of completing admission requirements for the programme. Applicants who have not completed the admission requirements or have not demonstrated that they are in the process of completing the necessary requirements will not be considered.
- c) All applicants who are selected in the initial acceptance process and who are sent a notice of acceptance, will be given 30 days to submit a \$100.00 non-refundable deposit. If the deposit is not received in the Registrar's Office within 30 days, the applicant will lose their seat.
- d) All remaining fees to be paid not later than the normal programme registration date.
- e) All acceptances are conditional pending proof that admission criteria have been satisfied.

### ADVANCED STANDING

Students who have completed post-secondary courses in other institutions may be given advanced standing for these courses at CNC. Students are advised to consult with a counsellor well before classes begin, and to obtain a written acceptance of their advanced standing.

Unassigned credit will be granted on a course by course basis in consultation with the programme in which the credits apply.

### AUDIT STATUS

Students may audit courses under the following conditions:

1. The class has a vacancy. Students taking the course for credit are given priority on class lists;
2. The student must request audit status at the time of registration;
3. Students may change from regular to audit status during the regular ADD/DROP period if there is a vacancy in the class, and if all other admission requirements have been fulfilled;
4. Students may not change from regular to audit status after the official ADD/DROP period has passed without approval by the Instructor and appropriate Divisional Chair;
5. Credit is not awarded for audited courses;
6. The student must pay the regular fee for audited courses;
7. Audited courses are not considered part of the student's official work load.

### CREDIT HOURS

One credit hour usually represents one hour per week of classroom lectures. Most courses include three credit hours. As such, they require three hours of lectures per week, together with required study in laboratories, seminars, or tutorials. To achieve full-time status a student is normally enrolled in ten or more credit hours of courses each semester/ trimester.

**CERTIFICATE / DIPLOMA  
APPLICATION / DEGREE**

Students anticipating completion of their certificate, diploma or degree programme are required to apply to the admissions office. Students are encouraged to apply during their final term and will be considered pending final grades.

**CERTIFICATES**

Certificates are official CNC qualifications which are awarded to recognize academic studies which generally take one year to complete. The following programmes award official College of New Caledonia Certificates:

- ABE - 3 levels
  - Fundamental
  - Intermediate
  - Advanced
- Business Administration
  - Business Administration
  - Computer Information Systems
  - Management Studies
- Community Health Representative (Nechako)
- Cook Training
- COOP Career Skills
- Dental Assistant
- Drafting Technician
- Early Childhood Education (Basic)
- Early Childhood Education (Post-Basic)
- English as a Second Language (Beginners)
- Entry Level Trades (TRAC):
  - Automotive Mechanical Repair
  - Carpentry
  - Electrical Work
  - Heavy Duty Mechanical Repair
  - Millwright
  - Machinist
- Hand Falling (Mackenzie)
- Home Support Worker/Resident Care Attendant
- Office Administration
  - Administrative Secretary
  - Legal Secretary
- Power Engineering (4th Class)
- \* Social Services Programmes:
  - Foundations
  - Special Education Assistant
  - Developmental Disabilities
  - Developmental Disabilities - Advanced Specialty
- Welding (Registered "C" Level)

**DIPLOMAS**

Diplomas are official CNC qualifications which are awarded to recognize academic studies which generally take two years to complete. The following programmes award official College of New Caledonia Diplomas:

- Business Administration:
  - Accounting Finance
  - Computer Information Systems
  - Marketing and Management

- CAAT - Automotive Mechanical Repair
- CAAT - Heavy Duty Mechanical Repair
- Commercial Aviation
- Dental Hygiene
- Electronics Engineering
- Engineering Graphics & Design
- Forest Resource Technology
- Nursing
- \* Social Services Programmes:
  - Child Care and Family Support
  - Special Education Assistant/Classroom Aide
- University Credit:
  - Criminology

**DEGREES**

- University Credit (Associate Degrees):
  - Arts
  - Science

Associate Degrees are official CNC qualifications which recognize two full years of University Credit study and which meet the specific requirements of the degree. Specific requirements are listed under the University Credit section of this calendar.

**GENERAL STUDIES AWARD**

The General Studies Award is an unofficial recognition which is available to students who have accumulated 60 credit hours of general studies at the College but who do not have the appropriate combination of credits to qualify for an official College Certificate, Diploma or Associate Degree. As this is an unofficial recognition, students may apply credits that have been used to earn this award to qualify for official College qualifications at a later date.

**GRADING SYSTEM**

Alphabetic symbols are used to report academic achievement. Each grade is assigned a numerical grade point used in determining the grade point average. Grade points are calculated by multiplying the credit hours of the course by the numerical equivalent of the letter grade. Grade point averages are calculated by dividing the total number of grade points by the total number of credit hours and are reported on each statement of grades. The cumulative grade point average is reported on the transcript.

Letter Grade		Grade Points
A	Outstanding achievement	4.0
B+		3.5
B	Good achievement	3.0
C+		2.5
C	Satisfactory achievement. The lowest standing on which to base further study in a discipline.	2.0

## ADMISSIONS RECORDS AND REGISTRATION

P	This grade does not meet prerequisite requirements unless specifically stated as doing so in individual course descriptions. Where this grade is not listed as meeting specific course prerequisite requirements both instructor and Department Chair written approval are required for this grade to be recognized as acceptable.	1.0
CS	Continuing Status (Student may continue in the same level. Applicable to ABE Fundamental Level Students ONLY)	
S	Successful achievement of determined learning requirements in a competency based course.	*
U	Unsuccessful achievement of determined learning requirements in a competency based course.	*
I	Incomplete. Grade and credit withheld until all requirements of the course have been met. Students must complete all required work within 4 weeks from the last day of semester term and within 3 weeks from the last day of trimester term or an "F" grade will be assigned.	*
F	Fail. No credit granted.	0
E	Exempt. This grade is assigned where a course is successfully challenged. Credit granted.	*
N	A student who completes no assignment for grading and who fails to officially withdraw from the course will receive a "N" grade.	0
W	A "W" grade will be assigned to those students completing the withdrawal procedure within the time limits specified in the Calendar.	*
AUD	Audit Status. No credit granted.	*
TER	This letter grade signifies that the student was terminated from the applicable course and requires the permission of the Divisional Chair to re-enroll. Not included in the calculation of the grade point average.	
AG	Student completed a modified programme. An annotated report is available.	*
* Not included in GPA.		

### Grading Scales

#### Nursing, Dental Hygiene and Cooking

A	90 - 100%
B+	85 - 89%
B	80 - 84%
C+	75 - 79%
C	70 - 74%
F	0 - 69%

#### All other programmes

A	88 - 100%
B+	81 - 87%
B	74 - 80%
C+	67 - 73%
C	60 - 66%
P	50 - 59%
F	0 - 49%

### Grade Point Average (GPA) Calculation

The GPA is calculated by multiplying the grade points earned by the number of credits, and then dividing the result by the number of credit hours taken. Example:

Credit Hours	Letter Grade	Grade Points	Grade Points Credit Hours
3	A	4	12
3	B	3	9
4	C	2	8
2	P	1	2
3	F	0	0
<hr/>			<hr/>
15			31

GPA is 31 divided by 15 equals 2.07

### Statement of Grades

At the end of each semester/trimester, or at the end of a programme, a Statement of Grades is made available to each student enrolled in a course for credit. All obligations relating to fees, library books or fines, rentals, loans, etc. must be met before any statement of grades, transcript, certificate or diploma will be released.

### Repeating a Course

Courses may be repeated for the purpose of raising grades. Credit will be granted for the higher grade achieved. The highest grade point is included in the overall GPA. Other institutions to which a student might transfer may re-calculate the GPA to include both grades obtained.

### Student Records

Student records contain confidential information and are therefore handled accordingly. Disclosure of information from these files is authorized only in response to:

1. A request from a student for information from his/her record;

2. A request accompanied by the student's written authorization to access his/her record;
3. A court order;
4. A government agency's request for data to be used in statistical analysis and research, provided that confidentiality is assured.

### GRADUATION HONOURS

Any student in a programme where GPA's are calculated, such as University Transfer and Career-Technical, who has a cumulative GPA of 3.50 or better at the time of graduation will be considered to have Graduated with Honours.

Any student in a programme where GPA's are not calculated, such as Vocational or Adult Basic Education, who were included on the President's List upon completion of their programme will also be considered to have Graduated with Honours.

All students who have Graduated with Honours will have this noted on their transcripts and will also have a special seal noting Graduation with Honours placed on their certificate or diploma.

### PRESIDENT'S LIST

The College annually recognizes students on the basis of academic achievement in the form of inclusion on the President's List. Inclusion on the President's List is governed by the following regulations:

#### 1. Eligibility - Full Time

All University Credit and Career-Technical students who complete an academic year and who have maintained a full-time enrolment status in every trimester or semester of the year.

All Vocational or Adult Basic Education students who have completed a full-time programme of at least four months duration between August 1st and July 31st of any year.

#### Eligibility - Part Time

All University Credit and Career-Technical students who have not maintained full-time status but who reach either 30 or 60 credits during the course of the academic year.

All Vocational and Adult Basic Education students who have not maintained full-time status but who complete a certification for a programme of at least four months duration at any time between August 1st and July 31st of any year.

#### 2. Criteria

Students in programmes where GPA's are calculated, such as University Credit and Career-Technical, must have an overall GPA of 3.50 or higher for the academic

year. Part-time students must have an overall GPA of 3.50 or higher at the point where they complete 30 or 60 credits.

Students in programmes where GPA's are not calculated, such as Adult Basic Education and Vocational, can be included on the President's List upon the recommendation of the Faculty and Division Chair upon completion of a programme of at least four months duration. These recommendations will generally recognize the top 15% of eligible students or those with a "B+" or better standing where appropriate.

#### 3. Recognition

Students who earn a place on the annual President's List will receive the following forms of recognition for their achievement:

- letter of congratulation signed by the President;
- publication of their names in local newspapers if they are from the College region, in the Prince George Citizen for all students and in the College student newspaper for all students;
- annual posting of their names on a College Honour Roll;
- notation on their transcripts that they have earned a spot on the President's List for the year in question.

#### 4. Note

Any student not wishing to be considered for inclusion on the President's List should inform the Registrar.

### TRANSCRIPTS

Official transcripts bear the Registrar's seal and signature, and may be obtained from the Office of Admissions and Registration at a cost of \$5.00 for the first copy and \$1.00 for each additional copy. Upon request, the Office of Admissions and Registration will forward official transcripts to potential employers, educational institutions, and other agencies. To request official transcripts, a student must complete a Transcript Request Form, and submit it to the Registrar's Office no later than Thursday noon for receipt of the transcript on the subsequent Friday.

### TRANSFER TO OTHER INSTITUTIONS

Students planning to transfer their credits to another institution should consult the calendar of that institution and the British Columbia Transfer Guide published by the British Columbia Council on Admissions and Transfer (available in the CNC Counselling Department) to verify transferability of credits. CNC counsellors will assist students in selecting transferable courses; however, the final responsibility for course selection rests with the student as transfer agreements are continuously being negotiated and changed.

## **WITHDRAWAL FROM COURSES**

A student may withdraw from a course without academic penalty under the following conditions:

1. Prior to 40% completion of the course—the instructor's signature is not required;
2. Prior to 60% completion of the course, provided a "P" grade or above has been maintained — the instructor must sign the withdrawal form;

Students who withdraw from a course without meeting these conditions will receive an "F" grade which will be accounted for in the calculation of the grade point average. This grade may be appealed through the Grade Appeal procedure. A student seeking re-admission to a course, from which he/she has withdrawn more than once, will be assigned the lowest priority on the course waiting list.



# EE INFORMATION

## SEMESTER PROGRAMMES

- Business Administration
- Commercial Aviation
- Forest Resource Technology
- Social Services Training
- University Credit

All fees are payable at the time of registration.  
Fees are charged by course based on lecture plus lab contact hours.

The programme fee consists of:

- Tuition \$98.00 per course  
(Standard lecture - 45 hours)
- Lab Fees \$48.00 per course  
(Standard Lab - 45 hours)
- Student Association \$7.50 per course  
(\$30.00 / semester max.)
- Registration Fee \$15.00 per semester

- Note:**
1. Courses not offered in standard format will have their fees pro-rated.
  2. Maximum total lecture and lab fees for Forest Resource Technology and Business Administration is \$587.00 per semester.
  3. An additional coastal field trip fee will be charged to Forest Resource Technology students in the 4th semester. The fee will range between \$300.00 and \$400.00 depending on the number of field trip participants.
  4. There is no maximum fee level for a University Credit Programme.
  5. FORS 202 (Forest Ecology) students will be charged an additional \$40.00 field trip fee for the two-day field trip to the Robson Valley.

## CALCULATION OF COURSE FEES

Individual Course Fees include both lecture fees and lab fees (if applicable), and are calculated by the following formula:

[Duration (in weeks)] x [contact hours per week] x [\$ per contact hour]

Examples:

**ANTH 101 (3,0)**  
Lecture Fee: [15] x [3] x [\$2.18] = \$98.00  
Lab Fee: (not applicable)  
**Total Course Fee \$98.00**

**BIO 101 (3,3)**  
Lecture Fee: [15] x [3] x [\$2.18] = \$98.00  
Lab Fee: [15] x [3] x [\$1.06] = \$48.00  
**Total Course Fee \$146.00**

### MATH 101 (4,0)

Lecture Fee: [15] x [4] x [\$2.18] = \$131.00  
Lab Fee: (not applicable)  
**Total Course Fee \$131.00**

## TRIMESTER PROGRAMMES

- Drafting Technician
- Dental Hygiene
- Electronics Engineering Technology
- Engineering Graphics & Design Technology
- Nursing

All fees are payable at the time of registration.  
Fees are charged by course based on lecture plus lab contact hours up to the trimester maximum.

Fees for each Trimester are:

- Lecture and Lab Fees \$390.00 maximum
- Student Association \$5.00 per course  
(\$20.00 / trimester max.)
- Registration Fee \$15.00 per trimester

## CALCULATION OF COURSE FEES

Individual Course Fees include both lecture fees and lab fees (if applicable), and are calculated by the following formula:

[Duration (in weeks)] x [contact hours per week] x [\$ per contact hour]

Examples:

**NURS 258 (3,0)**  
Lecture Fee: [12] x [3] x [\$2.18] = \$78.00  
Lab Fee: (not applicable)  
**Total Course Fee \$78.00**

**DHYG 155 (2,2)**  
Lecture Fee: [12] x [2] x [\$2.18] = \$52.00  
Lab Fee: [12] x [2] x [\$1.06] = \$25.00  
**Total Course Fee \$77.00**

**TELE 152 (4,3)**  
Lecture Fee: [12] x [4] x [\$2.18] = \$105.00  
Lab Fee: [12] x [3] x [\$1.06] = \$38.00  
**Total Course Fee \$143.00**

**ASSESSMENT FEES**

Adult Basic Education Placement Test - \$5.00.  
English & Math Achievement Test (EMAT) - \$5.00.

**INTERNATIONAL STUDENT FEES**

Tuition fees for international applicants are set at 6.5 times the regular tuition fees charged. This is in keeping with the Ministry of Advanced Education, Training and Technology Policy on Tuition Fees for International Students at B.C. Colleges and Institutes, designed to set international student fees at a rate which covers all direct costs and overhead.

**SENIOR CITIZEN FEES**

It is CNC policy to waive tuition, identification card, registration, and Student Association fees for senior citizens (over the age of 65). This exemption applies to all credit courses and non-credit courses provided that the tuition fee is not required to cost-recover the course.

**SPONSORED STUDENT FEES**

A number of agencies, such as Employment & Immigration Canada (EIC), sponsor students by purchasing spaces in some programs or by paying tuition fees. Students who have been admitted as sponsored students are required to pay Student Association and other fees not covered by the sponsorship and must present written confirmation of sponsorship prior to registration.

**TUITION REFUND POLICY**

Fees are totally refunded when a course or program is cancelled. When a student withdraws from a course or program, fees are refunded as follows:

- a) A refund of 75% is granted if a student withdraws before the end of the first week of classes, or prior to 7% completion of a course in a program/course which is less than four months in duration.
- b) A refund of 50% will be granted if a student withdraws before the end of the second week of classes, or prior to 14% completion of a course in a program/course which is less than four months in duration.
- c) Special consideration is given for medical withdrawal.

If a student withdraws more than two weeks after classes start, or after 14% completion of courses in programs/courses less than four months in duration, no refund will be granted. Students enrolled in Developmental Studies who complete the program in less than fifteen weeks will have their tuition fees refunded on a pro-rata basis.



## FEE INFORMATION

PROGRAMME	TUITION	STUDENT ASSOC.	REGISTRATION	LAB FEES	OTHER	TOTAL
<b>COOK TRAINING</b>	<b>\$990.00</b> (\$99.00 / month)	<b>\$62.50</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)	<b>\$96.00</b> (\$48 / 1/2 programme)	<b>\$46.00</b> Uniform Cleaning (\$23 / 1/2 programme)	<b>\$1209.50</b>
<b>DENTAL ASSISTING</b>	<b>\$990.00</b> (\$99.00 / month)	<b>\$62.50</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)	<b>\$96.00</b> (\$48 / 1/2 programme)		<b>\$1163.50</b>
<b>HOME SUPPORT/ RESIDENT CARE ATTEN- DANT</b>	<b>\$507.50</b> (\$29.00 / week)	<b>\$25.00</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)	<b>\$48.00</b> (per programme)		<b>\$595.50</b>
<b>POWER ENGI- NEERING</b>	<b>\$990.00</b> (\$99.00 / month)	<b>\$62.50</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)			<b>\$1067.50</b>
<b>WELDING Level C Beginner Full-time</b>	<b>\$594.00</b> (\$99.00 / month)	<b>\$37.50</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)	<b>\$48.00</b> (per programme)		<b>\$694.50</b>
<b>WELDING Level A &amp; B and extensions</b>	<b>Variable</b> (\$29.00 / week)	<b>Variable</b> (\$6.25 / month)	<b>\$15.00</b> (per programme. Not applied to extensions)	<b>Variable</b> (\$6.50 / week. Not applied to extensions)		<b>Variable</b>
<b>EARLY CHILDHOOD EDUCATION</b>	<b>\$587.00</b> (per semester maximum)	<b>\$30.00</b> (per semester maximum)	<b>\$15.00</b> (per programme)			<b>Variable</b> (\$632 / semester maximum)
<b>ADMINISTRATIVE SECRETARY &amp; LEGAL SECRETARY</b>	<b>\$891.00</b> (\$99.00 / month)	<b>\$56.25</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)	<b>\$96.00</b> (\$48 / 1/2 programme)		<b>\$1058.25</b>
<b>CAAT TRAINING Auto and Heavy Duty Mechanics (based on a four month semester)</b>	<b>\$568.00</b> (\$142.00/month)	<b>\$25.00</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)			<b>\$608.00</b> (for 4 month programme)
<b>ENTRY LEVEL TRADES (6 month programme)</b>	<b>\$498.00</b> (\$83.00 / month)	<b>\$37.50</b> (\$6.25 / month)	<b>\$15.00</b> (per programme)	<b>\$145.00</b> (per programme)	<b>\$50.00</b> Tool Deposit (refundable)	<b>\$695.50</b> (Does not include tool deposit)
<b>ENTRY LEVEL TRADES (part-time)</b>	<b>Variable</b> (\$29.00 / week)	<b>\$6.25</b> (per course)	<b>\$15.00</b> (per programme)		<b>\$50.00</b> Tool Deposit (refundable)	<b>Variable</b>
<b>ADULT BASIC EDUCATION Intermediate, Advanced and Provincial EXTENSIONS</b>	<b>\$99.00</b> (per course)  <b>\$30.00</b> (per month)	<b>\$7.50</b> (per course)  <b>\$6.25</b> (per month)	<b>\$15.00</b> (per programme)			<b>Variable</b>  <b>Variable</b>
<b>ENGLISH AS A SECOND LANGUAGE (6month programme)</b>	<b>\$244.00</b>	<b>\$37.50</b> (\$6.25 / per month)	<b>\$15.00</b> (per programme)			<b>\$296.50</b>
<b>DEVELOPMENTAL CENTRE COURSES</b>	<b>\$86.00</b> (per course)		<b>\$15.00</b> (per session)			
<b>COOPERATIVE EDUCATION</b>	<b>\$196.00</b> (per Co-op Term)		<b>\$15.00</b> (per Co-op Term)			<b>\$211.00</b>



# FINANCIAL AID

## SCHOLARSHIPS, AWARDS, and BURSARIES

The College of New Caledonia offers scholarships, awards and bursaries to recognize academic achievement and to provide financial assistance to those in need who maintain satisfactory academic status. The Financial Aid Catalogue, available at the Financial Aid Office (Rm 2-132) and at the Regional Campuses, provides complete information on all financial awards. Below is a listing of awards currently administered by CNC; information with regard to other awards from external agencies is also available. **Award recipients are expected to attend the award presentation ceremonies held regularly, in the Fall and Spring, to receive their awards.**

### ANNUAL AWARDS

Donor	Application Deadline
<b>Fall Awards</b>	
Auxiliary of the Associated Canadian Travellers Award	September 30
B.C. Gas Inc. Scholarship	September 30
B.C. Lung Assoc. Bursary	September 30
B.C. Telephone Co. Bursaries	September 30
Central Interior Logging Assoc. Scholarship	September 30
CNC Forestry Society Award	September 30
Dunkley Lumber Ltd.	
- Quesnel Campus Bursary	September 30
Dunkley Lumber Ltd.	
- Quesnel Campus Scholarship	September 30
Finning Ltd. Bursary	September 30
Husky Oil Scholarship	September 30
Human Resources Management Association Award	September 30
Institute of Chartered Accountants of B.C. Bursary	September 30
Knights of Columbus, Council 8927 Bursary	September 30
McGregor Wilderness Society Scholarship	September 30
Ministry of Women's Programmes & Government	September 30
Northern Interior Lumber Sector of Forest Industries of B. C. (C.O.F.I.) Scholarships	September 30
Northland Chrysler CAAT Automotive Bursary	September 30
Norhwood Pulp and Timber Ltd. Scholarship	September 30
Novak Bros. Contracting Ltd. Bursary	September 30
Novak Bros. Contracting Ltd. Scholarship	September 30
P.G. Alzheimer's Society Bursary	September 30
P.G. and District Dental Society Bursary	September 30
P.G., Cariboo and Central Interior Transportation Club	September 30
P.G. Savings Credit Union Scholarship	September 30
Pulp, Paper & Woodworkers of Canada Local 9 Bursaries	September 30

Rotary Club of Prince George Awards	September 30
Sam Ketcham, Phil Bodman Memorial	September 30
Welding Institute of Canada Ltd.	September 30
Weldwood of Canada Ltd. Bursaries	September 30

Spring Awards	Application Deadline
ABE Association Awards	January 31
ABE Bursaries	January 31
Canadian Federation of University Women - Prince George	January 31
Canadian Federation of University Women - Prince George - Janet E. King Memorial Bursary	January 31
Canadian Forest Products Ltd. Scholarship	January 31
Cariboo Central Interior Radio Inc.	January 31
Certified General Accountants Assoc. of B.C.	January 31
CNC Faculty Association Scholarships	January 31
CNC Forestry Society	January 31
CNC Student Association Scholarships	January 31
CNC Student Association Bursaries	January 31
Credit Union Foundation Bursaries	January 31
Credit Union Pioneers' Memorial Bursaries	January 31
David Sali Memorial Bursary	January 31
Finning Ltd.	January 31
Heather Sadler Jenkins Scholarship	January 31
Jean Humphrey's Award	January 31
Jeanette Beaulieu Memorial Scholarship	January 31
Knights of Columbus, Council 8927 Bursaries	January 31
Lionel Lamoureux Memorial Award	January 31
Norhwood Pulp and Timber Ltd	January 31
Pat Earle Memorial Bursary	January 31
P.E.O. Sisterhood	January 31
P.G. Alzheimer's Society Bursary	January 31
P.G. Business and Professional Women's Club	January 31
P.G. Chartered Accountants Assoc. Scholarship	January 31
P.G. Savings Credit Union Scholarship	January 31
P.G. Savings Credit Union Athletic Bursary	January 31
P.G. Savings Credit Union Athletic Scholarship	January 31
P.P.W.C. Local 29 Bursary	January 31
Regional District of Fraser - Fort George Bursary	January 31
Robert Fulton Memorial Scholarship	January 31
Society of Vocational Instructors (CNC Chapter)	January 31
Timberline Forest Inv. Consultants Scholarship	January 31
Welding Institute of Canada	January 31
Women's Equity Bursary	January 31

### Miscellaneous Deadlines

Donor	Application Deadline
Canadian National Scholarships for Women	July 29
Canadian Federation of University Women - PG	April 30
CNC Admission Bursaries	May 31
CNC Entrance Scholarships	December 31
Dr. Hugh Stephen Memorial Bursaries	May 31
Northland Chrysler Automotive Training Bursary	Open
Northwood Pulp and Timber Ltd	April 30

## FINANCIAL AID

Rotary Club of Prince George Bursary	April 30
Rotary Club of Vanderhoof	August 15
Russell Kenneth Dillabough Memorial Scholarship	April 30
Society of Management Accountants of B.C. Scholarship	April 30

### ENDOWMENT FUND AWARDS

Donor	Application Deadline
Anthony Karpicius Forestry Scholarships	January 31
Auxiliary to Prince George Regional Hospital Bursary	September 30
B.C. Hydro	January 31
City of Prince George Bursary	January 31
CNC Cooperative Education Award	January 31
CNC Endowment Bursaries for Full-Time Student	January 31
CNC Endowment Bursaries for Part-Time Student	January 31
CNC Endowment Bursaries for Regional Students	January 31
CNC Endowment Scholarships	
a) Adult Basic Education	
b) Health Sciences	
c) Technologies, Construction Management or Engineering Graphics	
d) Vocational and Trades	
e) Social Services and Early Childhood Education	
f) Office Administration	January 31
CNC Gourmet Dinner Scholarships	January 31
Don Flynn Forestry Education Awards	January 31 April 30 June 30 September 30
Dr. Hugh Stephen Memorial Bursaries	January 31
Dr. John De Rosario Memorial Bursary	January 31
Duz Cho Logging Ltd. Forestry Scholarship	January 31
Ed Berry Memorial Bursary	January 31
FMC Canada Ltd. Scholarships	January 31 September 30
Hongkong Bank of Canada Scholarship	January 31
Jim Damiano Memorial Scholarship	January 31
Lakeland Mills Scholarship	January 31
Laureen Ens Award	September 30
Lloyd Anderson/ Steve Burgess Trades Scholarship	January 31
Logging Seminar Steering Committee Scholarship	September 30
Northern Institute for Resource Studies Awards	January 31 and September 30
Northern Silviculture Scholarship	January 31
P.P.W.C. Local 29 Endowment	September 30
Prince George Branch of the Association of Professional Engineers and Geoscientists of the Province of British Columbia Bursary	January 31

Real Estate Foundation Endowment Fund for Student Aid	January 31 and September 30
Vancouver Stock Exchange	September 30

### FINANCIAL ASSISTANCE

The Financial Aid Catalogue is the most comprehensive source of information on student loans. Students are advised to submit their loan applications well in advance of their programme start date to allow for processing which can take up to twelve weeks. The British Columbia Student Assistance Programme (BCSAP) was established to supplement financial resources for post secondary education. Awards are provided to students based on calculated financial need. The Ministry of Advanced Education Training and Technology establishes financial need from the information provided in the student loan application. BCSAP allows for a modest student life-style and does have a ceiling on the level of available assistance.

#### Requirements For Loan Assistance

To be eligible for a B.C. Student Assistance Programme loan, a student must:

- Be a Canadian citizen or a permanent resident of British Columbia twelve months before starting school
- Possess a valid social insurance number
- Maintain a specified course load in a full-time programme for credit at an eligible post-secondary institution and work towards a certificate, diploma or degree
- Establish financial need by a standard BCSAP assessment of total costs, less student resources
- Complete an application from the Financial Aid Office at the College of New Caledonia, to be forwarded to the Ministry of Advanced Education Training and Technology.
- Accept responsibility to read the information on all documents upon acceptance of BCSAP funds
- Inform the bank of any changes and provide proof of ongoing full-time student status

Default on payments of student loans bears serious consequences. If you encounter difficulties contact your bank or the CNC Financial Aid Officer for information.

*Note: All students applying for a loan are strongly encouraged to attend a student loan workshop.*

*English 155 and Math 155 are not eligible to be included in the course load requirement for student loan programmes.*

*Further explanation of programme course loads may be provided by the Financial Aid Office.*

**Adult Basic Education Student Assistance Programme**

The Adult Basic Education Student Assistance Programme (ABESAP) provides tuition funding for:

- Basic literacy
- Academic upgrading
- English as a Second Language
- Pre-vocational Adult Special Education

The ABESAP programme is for tuition only and is given to students demonstrating a lack of financial resources. Upon acceptance into a programme an appointment with the Financial Aid Officer is required to complete an application to determine financial need.

The procedures and policies for the BCSAP and ABESAP are determined by the federal and provincial governments. The College of New Caledonia has no control of the policies or the upper limit of funds awarded.

**Emergency Loans**

The College of New Caledonia offers limited emergency loans to students encountering major unexpected expenses while attending school. It is assumed that the student has exhausted all other resources of financial assistance before coming to the Financial Aid Office. An application to and discussion with the Financial Aid Officer is required.

Students are required to sign a promissory note; which is a commitment to repay the interest free loan on or before a specified date agreeable to the College. A 24 hour waiting period is necessary for the processing of the loan. All arrangements for repayment of the loan must be made with the Financial Aid Officer.

# R REGULATIONS

## ATTENDANCE

Students attending the College with the assistance of a sponsoring agency or group should be aware that many of these agencies and groups have attendance requirements which go beyond those enforced by the College. It is the students' responsibility to be fully aware of any such policies that may apply to them. The College of New Caledonia bears no responsibility for any sanction or penalties that may be imposed by sponsoring agencies or groups that may result due to a lack of attendance. College of New Caledonia attendance policies, where appropriate, are listed under specific divisional descriptions.

## CLEAN AIR POLICY

The College of New Caledonia, in an effort to promote the physical health as well as the intellectual well being of its constituent members, prohibits smoking in all College facilities except in designated areas.

### Areas Designated for Smoking:

Smithers Building Room 2-712  
Academy I

one area may be designated in each of the Regional campuses provided the area is in compliance with local by-laws and does not entail costly expenditure.

one area may be designated in each of the Danson and Ogilvie campuses provided the area is in compliance with local municipal by-laws

## GRADE APPEALS

A student may request reconsideration of *final* course grades under the Grade Appeals procedure; problems regarding all other grades should be discussed with the instructor shortly after the grade is issued. Grounds for appeal include prejudicial or capricious grading by the instructor or clerical error. The appeal must be of sufficient substance to warrant a change to the grade if the appeal is successful.

1. The student must initiate the appeal process within thirty calendar days following the receipt of the final grade by discussing the matter with the instructor;
2. If the matter cannot be satisfactorily resolved with the instructor, the student may pursue the appeal by forwarding a written outline of the appeal to the instructor's Divisional Chair. If the Divisional Chair is the instructor, or if the Divisional Chair is absent, the written appeal should be forwarded to the Academic Vice-President. The appeal must specify the course, the instructor, the evidence upon which the appeal is based, and the resolution being sought.
3. Failing resolution with the Divisional Chair, the student may pursue the appeal by forwarding it to the Vice President - Academic who will verify that the appeal process has been properly adhered to, and will submit the appeal to the Grade Appeal Committee. In general, fourteen calendar days will be allowed for the appeal to

progress from the instructor to the Vice President - Academic.

Within seven days following receipt of the appeal, the Grade Appeal Committee will review the appeal, and will conduct hearings with the instructor and the appellant. When reviewing the appeal, the committee may request additional written submissions. When conducting its hearings, the committee will generally schedule the student for the first interview, and the instructor for the second. Joint interviews may be conducted if deemed appropriate by the committee. The student and the instructor both have the right to proxy representation at the interview, and may be accompanied by one additional person. If further clarification is required, the committee may interview, jointly or individually, the student and the instructor.

The committee will pursue all avenues appropriate to the resolution of the appeal. If a consensus is reached, the committee will submit, to the instructor, a report outlining recommended action and its rationale. If the instructor does not support the recommendation, the committee will then forward the report to the Vice President - Academic for final decision. The committee will never recommend that a lower grade be assigned. If the committee cannot reach a consensus, it will prepare a report outlining the issues involved and will forward it to the Vice President - Academic for decision.

## Clinical Practice — Appeal Procedure

A student who feels that he or she may have been unfairly treated in the evaluation of progress achieved in a Health Science programme may lodge a complaint using the clinical practice appeal procedure. This procedure is designed to facilitate the informal resolution of the appeal. Hearings rarely proceed to the sub-committee stage. Complete information on this procedure is contained in the *Health Science Student Handbook*.

## MISCONDUCT

College students are expected to conduct themselves honourably and maturely. Sanctions imposed for misconduct may include a warning, a re-assessment of the student's work, failure in a programme, denial of admission or re-admission, forfeiture of College financial aid, and suspension or termination. Offences covered by the Criminal Code of Canada shall be dealt with through the courts of law. Students terminated for misconduct require a Divisional Chair's/ Regional Manager's permission for re-admission to a programme. The College reserves the right to take whatever action deemed necessary to deal with improper behaviour such as cheating, plagiarism, disruption of instructional activities, damage to property, assault on individuals, and misrepresentation:

1. Cheating includes, but is not limited to, dishonest or attempted dishonest conduct at tests or examinations in which books, notes, diagrams, or other unauthorized aids are used;

2. **Plagiarism** includes presentation of another person's work or idea without acknowledgment. Students should caution themselves against unintended plagiarism by learning proper scholarly procedures. Normally, a plagiarized assignment will not be graded, and may result in failure of the course;
3. **Disruption of instructional activities** includes, but is not necessarily limited to, behaviour which interferes with lectures, seminars, tutorial group meetings or other related activities, and examinations or tests;
4. **Damage to property and assault on individuals** includes behaviour leading to vandalism of College, staff or student property. Also included is behaviour causing physical or emotional injury to staff and/or students;
5. **Misrepresentation** includes, but is not limited to, the fraudulent representation of information and the falsification of documents and academic records.

## **PROBATION AND DISMISSAL**

### **Programs Where Grade Point Average Applies**

A student registered in any number of credit hours who receives less than a 1.0 G.P.A. (Grade Point Average) in a term will be placed on probation in the next term or when the student next registers. A student placed on probationary status will be required to see a counsellor to discuss his/her academic progress and options for appeal.

To have probationary status removed a student must obtain a G.P.A. of 1.0 or greater at the end of the probationary term.

If a student's G.P.A. is below 1.0 at the end of the probationary term, the student will be prohibited from re-registering in the same program in the next term. Probationary status continues upon registering in an alternate program.

A student who achieves a G.P.A. of less than 1.0 in more than two consecutive terms will be required to withdraw from the college for one term.

### **Credit Programs Where Grade Point Average Does Not Apply**

In programs where G.P.A. (Grade Point Average) does not apply, a student whose performance is at an unsatisfactory level may be placed on probation for a specified period. If his/her performance continues to be unsatisfactory beyond a specified period, the student may be suspended.

Readmission will be subject to program policy. Where specific divisional policies exist for students on Academic Probation, these will supercede the general policy.

## **SEXUAL HARASSMENT & PERSONAL HARASSMENT**

The College of New Caledonia is committed to the principle that all employees and students have the right to work and learn in an environment free of harassment. This policy direction was expanded to include specific mention of sexual harassment.

### **Complaint Procedure**

Complaints of harassment shall be made to the Manager of the Human Resources Department.

The Manager of the Human Resources Department may recommend that the complainant meet with the alleged harasser or respondent to try to informally resolve the complaint, or may refer the matter to a Counsellor for mediation.

At this point, the Manager of Human Resources shall also inform the complainant of the full complaint procedure, of his/her right to seek redress without fear of reprisal under human rights or other related statutes and the time-lines involved. Time-lines may be extended in special circumstances.

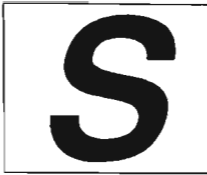
In the event the complaint is not settled through informal means, and the complainant wishes to proceed with a formal hearing, he/she shall submit a signed statement to the appropriate Vice-President, outlining the complaint and requesting a hearing.

## **STUDENT APPEAL PROCEDURE**

The student appeal procedure is the mechanism by which a student who perceives he/she may have been unjustly treated regarding the application of a College procedure, or regarding the action of a College employee, may seek recourse:

1. The student must first attempt to resolve the issue with the CNC employee on an informal basis within *sixty calendar days* following the incident;
2. Appeals will be resolved by the President based on recommendations provided by an ad hoc committee comprised of a student appointed by the Student Association, two faculty members appointed by the Vice President - Academic, and one administrator appointed by the President;
3. The appellant has the right to appeal the committee's recommendation(s) through the Vice President - Academic, who will ensure that the appeal procedure is adhered to by all parties involved.

The Student Appeal Procedure is designed to ensure that all parties involved are given the opportunity to state their views openly and honestly. Any party perceiving to have been unfairly dealt with by the Committee may seek recourse to the President or the College Board.



## SERVICES AND FACILITIES

### ATHLETICS AND RECREATION

The College is a member of the B.C. College Athletics Association (BCCAA), and is presently participating in volleyball on an intercollegiate level. All students registered in three or more credit courses, or in full-time Vocational or ABE programmes, are eligible to participate on the intercollegiate teams.

In co-operation with the Student Association, CNC offers a full range of scheduled intramural sports. Basketball, volleyball, soccer, softball, racquetball, and tennis are a few of the sports offered in past years. Fitness classes are offered from September to April and clinics are held in weight lifting and racquetball throughout the academic year. Recreational activities of a non-competitive nature are also held and the Athletics and Recreation department will assist students in establishing or offering most types of recreation activities.

The College has a large gymnasium, two racquetball courts, and a weight training facility available to all students. Equipment, services, and facilities are also available to the public. Further information regarding the gym may be obtained by calling 561-5803.

### COLLEGE STORE

The College Store, located in the Smithers Building near the main entrance, stocks all required course related texts and materials. Upon request, the store also places special orders.

In addition to textbooks, the Store stocks a wide variety of sundry supplies and College crested sportswear, glassware, and mementos. Hours of operation are from Monday to Thursday, 0800 to 1700, and Friday, 0800 to 1600. To accommodate students, evening hours are extended during the first two weeks of each semester. Summer hours run from Monday to Friday, 0800 to 1600.

### COMPUTER FACILITIES

The College has several computer labs accessible to students: one terminal lab, and a variety of microcomputer labs:

1. **Vax: Terminal Lab 3-370**

The VAX lab contains 22 CITO 326 terminals, 2 CITO 4000 dot matrix printers, and 1 Facit 4565 letter quality printer. The lab is accessible during College hours to all students who have an active user account. This facility is used primarily for teaching computer programming using Pascal, Modula, etc.;

2. **General Purpose Lab (GPL) 3-238**

This lab contains 22 Digital 386/25 MHz microcomputers, 6 Roland 2416 dot matrix printers, 1 Magnabyte colour overhead projection unit, 1 Laser 286/16 MHz microcomputer and 1 HP Laserjet printer. All microcomputers include a computer mouse and a math co-processor with a 105 MByte hard disk drive. It is accessible to all students during College hours except

during scheduled class time. Weekend access is available from 10:00 to 17:00 hrs. requiring lab coupons. Offering a wide variety of software applications, this lab is used primarily by Computer Information Systems. Other programmes, such as Forestry, Electronics, and Adult Basic Education also use the lab as required;

3. **Microcomputer Lab (MCL) 3-116**

This lab contains 23 Laser 286/16 MHz microcomputers, 6 Roland 2416 dot matrix printers, 1 Magnabyte overhead projection unit and 1 HP Laserjet printer. All systems include a computer mouse. This lab is primarily used by Computer Information Systems while offering general access to all students for word processing and spread sheet use with a variety of other applications available. The lab is open access to all students except during scheduled lab time;

4. **Word Processing Lab (WPL) 3-106**

The Word Processing Lab contains 25 Laser PC/XT microcomputers, 6 Roland 2416 printers 1 HP Laserjet printer, and 1 Magnabyte overhead projection unit. It is accessible during College hours unless occupied by scheduled classes. Offering various word processing and business software applications, this lab is used primarily by the Business and Management Studies programmes;

5. **Macintosh Lab (MAC) 2-304**

The Macintosh lab, located in the Library, contains 22 Macintosh Plus microcomputers, 1 Laserwriter IINTX laser printer, 4 Imagewriter II dot matrix printers and 1 Magnabyte overhead projection unit. These networked computers provide access to several software applications, including word processing, desktop publishing, graph, spreadsheet, draw, and accounting programmes to name a few. All students have access to this lab during library hours, except when it is reserved for teaching purposes;

6. **Technologies Lab (TECH) 3-321**

This lab is equipped with 8 Laser 386/25 MHz, 8 Laser 386/20 MHz microcomputers, 16 Kurta digitizer tablets, 3 Roland 1212A dot matrix printers, 3 HP 7475A 6 pen Plotters, 1 HP Draftpro 8 pen plotter and 1 colour Magnabyte overhead projection unit. This lab is primarily used by the Engineering and Graphics programme using software applications AutoCad, Lotus 1-2-3-, dBASE and Word Perfect. There are specific engineering programs for Storm Water Management, GIS, Big O Storm Sewer and Waterworks. Access to the lab, other than during scheduled classes, is by computerized access code assigned to students;

7. **Other Lab Facilities**

There are microcomputer facilities available as part of other specific labs: Physics - 4 microcomputer systems; Chemistry - 3 microcomputer systems; Forestry - 2 microcomputer systems with digitizers and plotters and an interactive Video disk component; DSC - Apple II

microcomputers; ABE - Apple II microcomputers; Math Lab - one microcomputer;

**8. Open Access Area - Library**

There are 3 IBM and 3 Macintosh Plus microcomputers and printers located in the open access area in the Library. These are accessible to all students during Library hours. Users have access to a variety of word processing and business applications software.

The Regional Centres are also equipped with computer lab facilities. The labs are configured with either Laser 286/16 MHz or Laser 386/33 MHz microcomputers with dot matrix and laser printers and an overhead projection unit. Other equipment available are Macintosh and Apple II microcomputers. Common word processing and business application software are available in all region lab facilities.

All of the computer facilities are available to all students at all times when the College is open except during scheduled class time and on weekends when access is monitored by a lab monitor and by use of the Lab Access Coupon. These coupons are available from Faculty members or may be purchased at the Library.

**COUNSELLING AND ACADEMIC ADVISING**

The Counselling Centre provides a comprehensive counselling and advising service to assist students and prospective students in successfully achieving their objectives. Professional counsellors and advisors can provide assistance in dealing with academic, career, and personal concerns. Individuals are encouraged to consult with a counsellor when:

- Entering college;
- Establishing career and life goals;
- Encountering barriers to personal and academic success;
- Transferring to another post-secondary institution;
- Entering the job market;
- Encountering personal problems and crisis;
- Requiring assistance with appeals.

Academic Advising are available to assist students in planning educational programmes, in obtaining information on career options and skill requirements, and in job search preparation and techniques. Anyone requiring assistance from the Counselling and Academic Advising Centre is advised to make an appointment by calling 561-5818. Centre hours are from Monday to Friday 08:00 to 16:00. Evening and drop-in times are regularly scheduled.

In addition to regular services the Counselling and Academic Advising Centre offers:

**Student Success 800** course.

Topics include:

Goal Setting; Time Management; Memory; Power Reading; Notetaking; Test Preparation; Research Paper Preparation; Critical Thinking; and Stress Management. The text for the course is titled *Becoming a Master Student* (1991).

**Career Exploration Workshops.**

These workshops are designed to assist participants to:

- Broaden their understanding of the issues in career exploration.
- Undertake an organized, meaningful self-appraisal.
- Evaluate career options on the basis of personal needs, preferences and concerns.
- Identify and access sources of occupational and educational information.
- Develop short and long term plans which will facilitate movement toward personal goals.

Students participating in the workshop are introduced to an extensive collection of resource materials in the Career Centre in the Counselling and Academic Advising area.

**DAY CARE**

A daycare service for children aged three to five years is offered by the Demonstration Centre at the main campus. This service is available to students, as well as to all members of the community, on a monthly fee basis. The Centre is staffed by qualified early childhood educators. To obtain information regarding this service, contact the Head Teacher at 561-5834.

**EMERGENCIES AND EVACUATION PROCEDURE**

The College has several qualified first aid attendants on staff. In the event of an emergency requiring first aid attention, an attendant can be reached at Local 200. All accidents must be reported to the Human Resources office within 24 hours of occurrence.

The College does not have a public address system that extends to the classrooms. Given the large number of students and classrooms, it is impossible to communicate messages, other than emergencies. Students should not use the switchboard to relay messages. In some cases, messages may be relayed through the Student Association office. (562-7415 or 562-2131 Local 365).

The fire alarm operates in two stages; a slow intermittent ring signals a fire occurring in another area of the College. A fast ring indicates a fire in the immediate area, and everyone must leave the building via the nearest exit—the elevators must not be used.

**EMPLOYMENT PLACEMENT**

The Placement Services office, located in the Counselling Centre, assists students and graduates in identifying career oriented employment opportunities. Providing a liaison between the College and prospective employers, the Placement Services Office assists with full-time, part-time, temporary and some summer employment opportunities.

Additional services include the coordination of student interviews either on-campus or at an employer's premises.

Students may drop by the Student Placement Office anytime to discuss employment opportunities. For further information, call 561-5840.



## SERVICES AND FACILITIES

Employment placement services are also available at the Canada Employment Centre (CEC) located 1190 2nd Ave., Tel: 561-5200. The CEC summer student employment office operates at the College campus from mid April to September, and offers services related to summer employment.

### FIRST NATIONS EDUCATION SUPPORT SERVICES

The College of New Caledonia, in partnership with the Carrier Sekani Tribal Council, has established the First Nations Education Support Service (F.N.E.S.S.). The purpose of this service is to promote the successful participation of First Nations students and communities in CNC education and training programs, and to assist CNC faculty and staff in providing service to First Nations students.

The staff of F.N.E.S.S. provides assistance, information and advice to First Nations students on course work, CNC programs, housing, career planning, student financial aid, child care services, and other student support services. F.N.E.S.S. can also assist local Bands and CNC regional campuses to assess community educational needs and develop proposals for local programs to meet those needs.

F.N.E.S.S. provides a tutoring service for Native students. In addition, F.N.E.S.S. coordinates a Native student drop-in/ study centre and supports the activities of the CNC First Native Students Club. The F.N.E.S.S. office is located at the Prince George Campus in the Smithers Building (behind the College Store). To find out more about F.N.E.S.S. contact 562-2131 local 256 or 562-6279.

### FOOD SERVICES

The Cafeteria is located on the main floor, and operates from September to June, 0700 to 2100 Monday to Thursday, and 0730 to 1500 on Fridays. It offers a salad bar, short order grill, complete full hot meals, and a variety of beverages and fresh bakery products.

Food Services is equipped to cater to all types of functions from small receptions and buffets, to large banquets. The professional staff can offer advice on planning menus, and other services suited to the occasion. For further information on services available, contact the Food Services Manager at 561-5807.

### HEALTH AND SAFETY

The College is committed to providing a safe and healthy environment for employees and students. To achieve this objective, all health and safety regulations are enforced, unsafe conditions are promptly corrected, and safety education is provided on a continuous basis. Students must comply with the Workers Compensation Board safety regulations, as outlined in the Programmes section where applicable.

### HOUSING

As there are currently no student residences on campus. Students are required to arrange their own accommodation.

These arrangements should be made as early as possible prior to the start of classes. The Student Association and Counseling and Academic Advising Centre maintain lists of uninspected accommodation offered throughout the city. It is the student's responsibility to determine the suitability of the accommodations listed.

### INFORMATION CENTRE/ SWITCHBOARD

The Information Centre is located on the second floor, at the main entrance. In addition to providing general orientation information, the Centre houses the Switchboard and the Lost and Found. All calls to 562-2131 are handled by the switchboard from Monday to Friday 0800 to 1600. Departments may be contacted after hours by dialing the numbers listed in the city telephone directory. As the College does not have a paging system, it cannot take messages for, or make contact with students except in the case of an emergency. However, most areas of the College now have access to a voice messaging system whereby messages can be left for return calls.

### INSTRUCTIONAL MEDIA SERVICES

Instructional Media Services (IMS) is located on the 3rd Floor of the main building. IMS offers equipment and media services to staff, students, and community groups. IMS is also the Desktop Publishing centre for the College. Various types of audio-visual equipment, including videotape recorders and cameras, audio equipment, projectors (slide, filmstrip 8mm movie, 16mm movie), lap top computers, modems, and overhead units for computers are available on loan. The College film collection is also maintained, housed and available for loan from IMS. Hours of operation are 0745 to 1700 - Monday to Friday. Summer hours are 0800 - 1600 - Monday to Friday.

### LIBRARY (RESOURCE CENTRE)

The Library (Resource Centre) is located next to the entrance on the second floor of the main building. Open to the general public as well as to students, the Library offers a broad range of resources including books, periodicals, newspapers, federal and provincial government documents, audio-visual materials, a computer job bank and other computer information services. The holdings of other libraries are available through the inter-library loan program.

Assistance in locating information and in using the Centre's resources is available from the staff at the Information Desk. Orientation tours are provided to groups as well as to individuals upon request. Library patrons have access to study carrels, small group areas, informal reading lounges, and a quiet study area. Photocopiers, typewriters, audio-visual equipment, microcomputers and a public fax machine are available.

From September to May, the opening hours are as follows:

- Monday - Thursday 0800 - 2230
- Friday 0800 - 2000

- Saturday 0900 - 1700
  - Sunday 1000 - 1700
- From June to August, the opening hours are as follows:
- Monday - Thursday 0800 - 1800
  - Friday 0800 - 1700

The College Library network extends to the region and there are collections at each Regional Centre. Further information may be obtained from the Regional Librarian (562-2131 Local 396) or by contacting the Regional Centre.

### SERVICES AND FACILITIES FOR STUDENTS WITH DISABILITIES

The Adult Special Education department provides support services to help persons with disabilities attend college programmes and participate in all facets of College life. Adult Special Education services include Transition Planning for prospective students, Learning Assistance support for registered students, and College Access services for students with disabilities who wish to learn in an integrated setting but may not meet regular entrance requirements as a result of a disability. The department also offers specific programmes for adults with mental handicaps/developmental disabilities (refer to the programmes section, Adult Special Education). Documentation of disability may be requested before service is provided.

#### Services:

- Assessment for programme placement;
- Development of individual learning objectives;
- Course modifications or adaptations to meet students' learning goals;
- Arrangement of the necessary learning support;
- Instructor liaison;
- College orientation;
- Programme / course selection in consultation with the counselling department;
- Adjustment support for students;
- Registration assistance;
- Information on financial assistance, housing, transportation and other community resources;
- Provision of alternate methods for taking exams, notetaking and assignment completion;
- Co-ordination of services for sign language interpreting and taping print materials.

#### Special Resources:

- Visualek magnification system;
- Speech plus calculator;
- Large print computer software;
- Laptop computer;
- Kursweil Reader;
- Four track tape recorder.

Every effort is made to provide services as requested, however, the range of these services is dependent upon availability of resources.

#### Facilities:

- The entrance between the Gym and the Dental Facility is equipped with an automatic door;

- Reserved parking spaces are available in the Dental parking area and in the main parking lot off 22nd avenue;
- Wheelchair accessible washrooms are located on every floor;
- The elevator is located in the center hallway in front of the switchboard (an access handbook is available from the Adult Special Education Department).

Prospective students are encouraged to contact the Adult Special Education Department to discuss special service needs in advance of enrolment. Up to four months lead time may be required to obtain certain specialized services. The Adult Special Education department welcomes suggestions regarding additional services or courses which should be offered at the College. To make an appointment or to obtain further information, call 561-5823, or 562-2131.

### STUDENT ASSOCIATION

The Student Association is an organization comprised of all registered students. The Executive is elected annually to direct the operations of the Association. With the assistance of an executive assistant, a work study student, and occasional staff, the Executive provides various services such as locker rentals, accommodation listings, used book sales, and organization of social/athletic events. The Association also sponsors the student newspaper and student radio station, and has an Ombudsman to deal with student complaints. Additional information regarding the Association may be obtained at its office located in Room 1-201 Vanderhoof Building, or by calling 562-7415 or 562-2131 Local 365.

#### CNC Free Press

The Free Press is a bi-weekly newspaper, funded by the Student Association, and published by the students for the College community. Its objective is to keep students apprised of events, issues, and developments at the College, and to provide students a vehicle for voicing their comments and concerns. Free Press staff members are all students who volunteer their time and talents to publish a reputable paper. Anyone interested in acquiring experience in writing, artwork, desktop publishing, or photography is encouraged to participate in the production of the newspaper. For more information, inquire at the Free Press office, located in Room 1-107 Vanderhoof Building (562-7441).

#### Radio CNC

The on-campus "station", Radio CNC provides an alternative to the PG stations. Operated completely by students, Radio CNC offers a variety of programming (Rock, Top Forty, Country, Jazz, etc.) and tries to satisfy all requests. Regular programming as well as "feature" slots cover twenty to thirty hours of air time a week, either pre-taped or "live", piped into the cafeteria and Smokers Lounge over a P.A. system.

As with the Free Press, Radio CNC relies on students volunteering for positions such as DJ, sales, promotion/advertising, and music advisors. If you are interested in any of these positions, drop off your name, phone number and

## **SERVICES AND FACILITIES**

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resume of related interests or experience at the Student Association Office. Radio CNC is located in Room 1-120, and can be reached through Local 365 (SA Office).

### **TEST SUPERVISION**

The Chief Examiner's Office and the Regional Centres provide supervision for various tests required for admission to universities, other institutions, or professions. These include:

- Admissions Testing Programme (ATP);
- General Certificate of Education Examination (GED) University of London;
- Graduate Management Admission Test (GMAT);
- Graduate Record Examination (GRE);
- Investment Funds in Canada
- Language Proficiency Index (LPI)
- Law School Admission Test (LSAT);
- Medical College Admission Test (MCAT);
- Miller Analogies Test (MAT);
- National Teacher Examinations (NTE);
- Scholastic Aptitude Test (SAT);
- Secondary School Admissions Test (SSAT);
- Test of English as a Foreign Language (TOEFL);
- Test of Spoken English (TSE);
- Others on request.

Further information may be obtained from the Chief Examiner's Office (561-5826) or from the Regional Centres.

### **TRANSPORTATION**

Full-time students with a valid student card are eligible to receive the Prince George Transit student rate. A bus schedule is posted at the main entrance to the campus.

### **VOLUNTEER ADULT LITERACY TUTORING (VALT)**

The College offers a free, confidential tutoring programme to assist adults who wish to acquire basic literacy skills. This one-to-one tutoring is provided with the assistance of community volunteers, trained by the College to serve as tutors. Based on an initial assessment, students are matched with a tutor. Student-tutor pairs usually meet two or three times per week, according to a schedule and location convenient to both the student and the tutor.

The VALT programme is offered at all five CNC campuses. More information may be obtained by contacting the VALT offices at 561-5835 or a regional campus.



## ADULT SPECIAL EDUCATION

### Divisional Contact:

**Patrick Storey**  
Division Chair, Human Services  
Programmes  
Telephone: (604) 561-5837

- JET 150 (Job Education and Training)
- TARGET 150 (Techniques for Access, Reaching Goals, and Employment Training)

The Adult Special Education department at the Prince George campus offers two programmes which are designed to assist individuals with developmental disabilities.

Both programmes offer maximum flexibility to their students. Structured in module format, they may be tailored to assist a student in achieving specific personal and/or employment goals. Programme duration will vary depending on the number of modules selected, and on the scheduling which may be either full-time or part-time.

The Regional Centres also offer special education programmes. The Quesnel campus offers the *Community Access Programme (CAP)* which assists adults with mental handicaps/developmental disabilities to develop and improve a variety of skills required for independent living. Course content is determined by the individual needs of each student. A similar programme, *Independent Living Skills/Pre-employment Training*, is offered at the Vanderhoof campus.

### Admission Requirements

Applicants must be 19 years of age or older. For information on programme prerequisites, contact the Department of Adult Special Education at 561-5823.

### Application Procedure

Applications to either of these programmes may be submitted at any time; all applicants are invited to a personal interview. Although most programmes start in September, it may be possible for a student to start at any time during the year depending on the seat availability. Anyone seeking entry into these programmes is encouraged to contact the TARGET or JET instructors to obtain specific information suited to their requirements.

College of New Caledonia  
3330 - 22nd Avenue  
Prince George, B. C.  
V2N 1P8

Tel: (604) 562-2131

### JOB EDUCATION AND TRAINING

Job Education and Training (JET) is offered to adult learners who wish to pursue entry level positions in today's competitive job market. The program is presented in a series of courses.

- Job Orientation
- Assertiveness and Interpersonal Skills
- Interview Skills
- The Job Search
- Job Maintenance Skills

Students may apply for all modules, or select only those which pertain to their personal goals. With student input, J.E.T. secures up to three work practicums which provide hands-on learning opportunities with community employers.

### TARGET

The TARGET Programme teaches students skills which will help them succeed in future supported employment situations. The programme combines classroom instruction with student work experience placements.

#### Basic Employment Skills Training

- Work Terms
- Work Attitudes
- Work Expectations
- General Work Skills
- Work Relationships
- Safety in the Workplace
- Conflict Resolution

#### Communications and Interpersonal Relations

- Conversation Skills
- Relationships
- Assertiveness
- Community Interactions
- Problem Solving

#### Work Interests

- Collecting of information, from a variety of resources (Student, Parent(s), Community Support Staff, Assessment Material(s), Career Exploration Activities) to ascertain each individual's potential work interests.

#### Success Strategies

- Personal Maintenance
- Values & Self-esteem
- Rights/Responsibilities
- Time Management
- Goal Setting
- Critical Thinking
- Resumes/Interviews

#### Work Experience Placements

Students may participate in part-time Work Experience Placements during designated programme segments. Work Experience Placements will give the students opportunities to apply skills, learned in the classroom, to employment settings. Students will also have the opportunity to learn specific work skills. Both direct and indirect support will be provided to the students while they are in placement.

# B

## BUSINESS AND MANAGEMENT STUDIES

### Divisional Contact:

**Bob Miller**  
**Chair, Business**  
**Telephone: (604) 561-5814**

#### Business Administration

- Accounting & Finance
- Computer Information Systems
- Marketing and Management

#### Business Management

- Business Administration
- Computer Information Systems
- Management Studies

#### Office Administration

- Administrative Secretarial
- Legal Secretarial

**College of New Caledonia**  
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**V2N 1P8**

**Tel: (604) 562-2131**

### BUSINESS ADMINISTRATION

The Business Administration Diploma programmes are designed to equip students with a broad understanding of business practices, in preparation for entry level management trainee and specialist positions in a variety of institutions, such as manufacturing, wholesaling, retailing, financial, and service enterprises, as well as government agencies. In addition, the Business Administration programmes provide a solid base in preparation for further education towards professional designations. Studies focus upon the application of computers within business. The students develop skills through intensive hands-on training with state-of-the-art equipment. The training labs are equipped with terminals on the DEC VAX 4500 time-sharing system and with microcomputers. The instructional staff maintain constant contact with industry ensuring the student receives relevant, current, and practical training. Students interested in furthering their business education are advised to consult the transfer guide in the Calendar, and to discuss their programmes with a counsellor.

#### Co-operative Education

All diploma programmes can be structured according to the Co-operative Education format, offering students the option to integrate career-oriented work experience placements into their academic programmes. Students earn a salary during their work terms, and gain valuable understanding and experience directly related to their chosen field.

#### Career Opportunities:

##### Accounting Diploma

The Accounting Diploma programme may qualify you for entry level positions in public practice and private industry. Further study and work experience can lead to such careers as controller, treasurer, public accountant and auditor. Many of the courses taken in the Accounting and Finance Diploma are recognized for credit by the Society of Management Accountants (CMA), the Institute of Chartered Accountants of B.C. (CA), and the Certified General Accountants Association (CGA).

##### Computer Information Systems Diploma

The Computer Information Systems programme prepares students for careers in the diverse field of computer information systems. A broad spectrum of career opportunities are available to CIS graduates, ranging from programmer or analyst in a centralized data centre, to the emerging employment opportunities with companies acquiring the new generation of microcomputers.

##### Marketing Diploma

The Marketing Diploma programme provides specific career employment areas including personal selling, advertis-

ing, sales promotion, marketing research, purchasing, product/brand management, physical distribution, public relations and consumer affairs and protection.

### Admission Requirements

1. Successful completion of Grade 12 (with English or Communications) or ABE Advanced Certificate or GED Certificate.

*Note: Effective September 1994 Math 11 or Math 045 will be required. Students without Math 11 or Math 045 may be accepted into a modified programme that includes math upgrading over the first year, and may extend programme completion.*

2. Applicants are strongly recommended to have taken, in the past five years, or have a strong working knowledge of:
  - Math 11, Typing 11 (20 w.p.m.)
  - Computer Science (11 or 12)
  - Data Processing (11 or 12)
3. Applicants must take the English and Math Achievement Test (EMAT), administered by the College, prior to the first semester. Students below a certain level in this test will be required to complete work in English and/or Math. It is strongly recommended that students write the EMAT in the spring BEFORE attending CNC. Students are also strongly advised to complete any required English and Math work, during the summer before their first semester.

### Application Procedure

Application forms are available at the Office of Admissions and Registration and may be submitted at any time. Acceptance of first year applicants begins the first week of April. All programmes begin the first week of September. Applicants are advised to consult with a counsellor to enter a programme at other times of the year.

### Programme Schedules

All diploma programmes are two years in duration. Students may, in consultation with a counsellor, structure their programme over a longer period. Modified programmes are available.

### Programme Outline:

#### Accounting & Finance Diploma

Semester I	September to December
ACC 151	Accounting I
AIS 151	Applied Interpersonal/Career Development Skills
CIS 152	Introductory Computing System
ECON 152	Macro-economics
MKT 152	Principles of Marketing
ENGL 155	Developmental English (*)
MATH155	Developmental Math (*)

*\* Students must receive an exemption or satisfactory standing in ENGL 155 and MATH 155*

Semester II	January to April
ACC 152	Accounting II
CIS 160	Introduction to Systems Analysis & Design
ECON 251	Micro-economics
MATH 157	Business Statistics
TCOM 190	Technical Communications I

Semester III	September to December
ACC 251	Intermediate Accounting I
ACC 255	Management Accounting I
FIN 257	Finance I
LAW 294	Business Law
TCOM 191	Technical Communications II

Semester IV	January to April
ACC 252	Intermediate Accounting II
ACC 256	Management Accounting II
MGT 254	Applied Group and Leadership Skills
FIN 258	Finance II
MGT 255	Small Business Development

**Programme Outline:  
Computer Information Systems Diploma**

<b>Semester I</b>	<b>September to December</b>
ACC 151	Accounting I
AIS 151	Applied Interpersonal/ Career Development Skills
CIS 152	Introductory Computing Systems
ECON 152	Macro-economics
MKT 152	Principles of Marketing
ENGL 155	Developmental English (*)
MATH 155	Developmental Math (*)

*\* Students must receive an exemption or satisfactory standing in ENGL 155 and MATH 155*

<b>Semester II</b>	<b>January to April</b>
ACC 152	Accounting II
CIS 160	Introduction to Systems Analysis & Design
CIS 170	Programming Concepts I
CIS 181	Microcomputing Systems and Operations
TCOM 190	Technical Communications I

<b>Semester III</b>	<b>September to December</b>
ACC 255	Management Accounting I
CIS 180	Computer Applications in Business
CIS 171	Programming Concepts II
CIS 260	Systems Analysis & Design
TCOM 191	Technical Communications II

<b>Semester IV</b>	<b>January to April</b>
CIS 262	Project Programming
CIS 282	Database Systems
CIS 284	Information Resource Management
MGT 254	Applied Group and Leadership Skills
MGT 255	Small Business Development

**Programme Outline:  
Marketing and Management Diploma**

<b>Semester I</b>	<b>September to December</b>
ACC 151	Accounting I
AIS 151	Applied Interpersonal/Career Development Skills
CIS 152	Introductory Computing Systems
ECON 152	Macro-economics
MKT 152	Principles of Marketing
ENGL 155	Developmental English (*)
MATH 155	Developmental Math (*)

*\* Students must receive an exemption or satisfactory standing in ENGL 155 and MATH 155*

<b>Semester II</b>	<b>January to April</b>
ACC 152	Accounting II
MKT 276	Retailing and Merchandising
MKT 281	Personal Selling
MATH 157	Business Statistics
TCOM 190	Technical Communications I

<b>Semester III</b>	<b>September to December</b>
LAW 294	Business Law
MKT 251	Marketing Management Theory & Application
MKT 271	Consumer Behaviour
MKT 272	Marketing Research Methods
TCOM 191	Technical Communications II

<b>Semester IV</b>	<b>January to April</b>
ACC 255	Management Accounting I
MGT 254	Applied Group and Leadership Skills
MGT 256	Entrepreneurial Development
MGT 255	Small Business Development
MKT 266	Advertising



## BUSINESS MANAGEMENT

The Business Management Certificate programmes are designed for students seeking to complement their current business experience with academic training.

The programmes may only be taken on a part-time basis, and are designed to provide mature students the opportunity to add accounting, computer information systems and general administration courses to their skill mix.

A wide selection of courses is available allowing students to tailor programmes to their needs and educational background.

Courses are offered during the day and evening on a rotating basis to accommodate these students working full-time.

### Admission Requirements

Programmes vary according to a student's interests and requirements, and are planned on an individual basis in consultation with the Counselling Academic Advising Centre and the Division Chair of Business. A student may start his/her programme at any time, as agreed upon between the student and a CNC Counsellor. Courses start in September and January.

### Application Procedure

Applications forms are available from the Office of Admissions and Registration and may be submitted at any time. Acceptance of first year applicants begins the first week of April. All programmes begin the first week of September. Applicants are advised to consult with a counsellor if they wish to enter a programme at other times of the year.

### Business Administration Certificate

The programme consists of seven required courses, plus three electives.

#### Required Courses

ACC 151	Accounting I
ACC 152	Accounting II
CIS 152	Introductory Computing Systems
FIN 257	Finance I
FIN 258	Finance II
MKT 152	Principles of Marketing
MGT 151	Management I

#### Electives

The three elective courses may be selected from Accounting, CIS, Commerce, Economics, Law, Management, or Marketing.

## Computer Information Systems Certificate

The programme consists of five required courses plus one elective.

#### Required Courses

CIS 152	Introductory Computing Systems
CIS 160	Introduction to Systems Analysis and Design
CIS 181	Microcomputing Systems and Operations
CIS 250	Information Systems Project
CSC 109	Computer Science I

#### Electives

CIS 153	Structured Basic Programming
CIS 251	Introduction to C
CSC 110	Computer Science II

*Note: At least one of the above six components will be available each term.*

## Management Studies Certificate

The programme consists of the following nine required courses, plus one elective.

#### Required Courses

ACC 151	Accounting I
ACC 152	Accounting II
CIS 152	Introductory Computing Systems
COM 222	Management and Organizational Behaviour
MGT 151	Management I
MGT 152	Management II
MGT 261	Human Relations
MGT 263	Personnel
MGT 264	Industrial Relations

#### Elective

The elective course may be selected from Accounting, CIS, Commerce, Economics, Law, Management, or Marketing.

## OFFICE ADMINISTRATION

The Office Administration Certificate programmes consist of four full-time nine week sessions and are designed to provide students the necessary skills for entry into the work force. Programmes are structured for the high school graduate or mature student with typing competency but little or no office experience. Those who are interested in a career in the business world may wish to pursue this programme.

Certificates will be awarded to students who successfully complete all courses in the programme with a grade of 'C' or better and a minimum typing speed of 60 w.p.m. At least three timed writings at this speed or better with five or fewer errors must have been completed before the student will be considered to have satisfactorily achieved this speed.

*\*Note: In order to proceed to the next term of the office administration programme, courses in the preceding term must be successfully completed with a 'C' grade or better. Check prerequisites for courses offered in each term.*

### Career Opportunities:

#### Administrative Secretarial

Graduates of the Administrative Secretarial Programme find employment in business, government, and industrial offices in a wide variety of positions. Examples are junior secretaries, word processing operators, clerk-typists and receptionists.

#### Legal Secretarial

Graduates of the Legal Secretarial Programme have found employment in private law firms, federal, provincial and municipal offices, real estate companies and accounting firms.

### Admission Requirements

1. Successful completion of Grade 12 (with English or Communications 12) or ABE Advanced Certificate or GED Certificate.
2. Applicants must take the English and Math Achievement Test (EMAT), administered by the College, prior to the first term. Students below a certain level in this test will be required to complete work in English and/or Math.
3. Valid documentation, current within the past three years, that verifies stated typing speed. This documentation can take the form of a transcript, a letter on institutional letterhead from a teacher of typing, typing test documentation, etc.
4. A resume or other documentation outlining past work experience.
5. High school students planning to enter the Office Administration programmes are strongly advised to have taken Grade 11 Typing and achieved a rate of at least 20 w.p.m. It is strongly recommended that those

who have no keyboarding skills complete a basic keyboarding course with a typing rate of at least 20 w.p.m. prior to the commencement of the programme.

### Selection Criteria

In those cases where the programme is over-subscribed, the following selection criteria will be used to select one-half of the class in the following order of priority:

1. Verified typing speed with preference given to those with a higher documented level of achievement.
2. Work experience that is relevant to the programme.

### Application Procedure

Application forms are available at the Office of Admissions and Registration and may be submitted at any time. Acceptance of applicants begins in the last week of April for the September intake.

### Programme Outline: Administrative Secretary Certificate

#### TERM 1 (9 weeks)

C-070	Communications I
F-070	Introduction To Records Management
P-070	Office Procedures
T-070	Keyboarding I
W-071	Microcomputer Applications I
ENGL 155	Developmental English (*)
MATH 155	Developmental Math (*)

*\* Students must receive an exempt or satisfactory standing in ENGL 155 and MATH 155.*

#### TERM 2 (9 weeks)

B-070	Business Machines
C-071	Communications II
D-070	Dictatyping
T-050	Typing Skill Development I
T-071	Keyboarding II
W-072	Microcomputer Applications II
or	
A 070	Secretarial Bookkeeping

#### TERM 3 (9 weeks)

W 072	Microcomputer Applications II
or	
A-070	Secretarial Bookkeeping
A 071	Computerized Bookkeeping
C-072	Communications III
T-051	Typing Skill Development II
T-072	Advanced Keyboarding

#### TERM 4 (9 weeks)

A-071	Computerized Bookkeeping
C-073	Communications IV
P-071	Secretarial Procedures
W-070	Word Processing

# BUSINESS AND MANAGEMENT STUDIES

## Programme Outline:

### Legal Secretary Certificate

#### TERM 1 (9 weeks)

C-070	Communications I
F-070	Introduction to Records Management
P-070	Office Procedures
T-070	Keyboarding I
W-071	Microcomputer Applications I
ENGL 155	Developmental English (*)
MATH155	Developmental Math (*)

\* Students must receive an exempt or satisfactory standing in ENGL 155 and MATH 155.

#### TERM 2 (9 weeks)

B-070	Business Machines
C-071	Communications II
D-070	Dictatyping
L-070	Introduction To Legal Office Procedures
T-050	Typing Skill Development I
T-071	Keyboarding II

#### TERM 3 (9 weeks)

A-070	Secretarial Bookkeeping
C-072	Communications III
L-071	Legal Processes I
W-070	Word Processing

#### TERM 4 (9 weeks)

A-071	Computerized Bookkeeping
C-073	Communications IV
L-072	Legal Processes II
T-051	Typing Skill Development II
W-072	Microcomputer Applications II

## Course Descriptions

### A-070 Secretarial Bookkeeping

This course will enable the student to acquire a knowledge of modern accounting principles and practices, to become familiar with the principles of controlling cash, not only from a business viewpoint, but also for personal use applications, and to prepare a set of merchandising financial statements to trial balance.

**Prerequisites:** MATH 155 and B-070 (5)

### A-071 Computerized Bookkeeping

After completion of A-070, the student will be given experience in using an up-to-date computerized accounting package and experience in setting-up a computerized accounting system.

**Prerequisite:** A-070 (5)

### B-070 Business Machines

Mathematical problems in various business settings are examined. Following a review of basic addition, subtraction, multiplication, and division, electronic calculators are used to solve cases in mark-up, mark-down, simple interest, discounts, ratios, and other related business calculations.

**Prerequisite:** MATH 155 (5)

### ACC 151 Accounting I 3 CR

A study of the fundamental concepts and techniques of the accounting process in proprietorships and corporations. Emphasis is placed upon the flow of information through the business and its relation to various functional areas. Topics include the balance sheet equation, journals, adjusting entries, financial statement preparation and closing entries. Payroll is introduced. The current asset section of the balance sheet is studied in detail, including cash, investments, receivables and inventory methods. (3,0)

### ACC 152 Accounting II 3 CR

A continuation of the introduction to fundamental accounting concepts and techniques. Topics include: plant assets, depreciation methods, current and long-term liabilities, partnership accounting, bonds and shareholders equity. The statement of changes in financial position is studied in depth, and financial analysis and consolidations are introduced. The computer lab component utilizes LOTUS 1-2-3 software.

**Prerequisite:** ACC 151 (3,2)

### ACC 251 Intermediate Accounting I 3 CR

A sound knowledge of fundamental accounting principles is essential to deal with the concepts presented in this course. The in-depth emphasis is on solving problems related to financial statements, cash, marketable securities, accounts receivable, current liabilities and inventories. The computer lab component utilizes Bedford accounting software.

**Prerequisite:** ACC 152 (3,2)

### ACC 252 Intermediate Accounting II 3 CR

An analysis of balance sheet accounts, which was started in ACC 251, is concluded with coverage of plant assets, long term investments and debt, and shareholder's equity.

Special topics include: treasury stock, leases, pensions and income tax. The statement of changes in financial position is thoroughly examined, and financial statements are analyzed. The computer lab component utilizes Accpac Plus accounting software.

**Prerequisite:** ACC 251 (3,2)

**ACC 255 Management Accounting I 3 CR**

An introduction to Managerial Accounting. Emphasis is placed on cost for planning and control. The following topics are included: job-order and process costing, cost-volume-profit relationships, cost behaviour, segmented reporting and contribution approach to costing. The computer lab component utilizes LOTUS 1-2-3 software.

**Prerequisite:** ACC 152 (3,1,5)

**ACC 256 Management Accounting II 3 CR**

A continuation of Management Accounting I. Topics include: profit planning, standard costs, flexible budgets, control in decentralized operations, pricing of products and allocation of service department costs. The computer lab component utilizes LOTUS 1-2-3 software.

**Prerequisite:** ACC 255 (3,1,5)

**ACC 354 Advanced Accounting 4 CR**

Topics include fundamental accounting, intercorporate investments, segmented and interim reporting, foreign currency transactions, reporting for non-business organizations, and other advanced topics. Theoretical and practical applications are covered for each topic.

**Prerequisite:** ACC 252 (4,0)

**ACC 371 Advanced Management Accounting 3 CR**

This course provides advanced treatment and in-depth quantitative analysis of materials included in ACC 255 and 256.

**Prerequisite:** ACC 256 (3,0)

**AIS 151 Applied Interpersonal / Career Development Skills 3 CR**

This course focusses on the personal management and interpersonal communication skills that contribute to success in the business world. Areas covered include: personal management, interpersonal communication and career development skills. Classroom participation and discussion are a necessary part of this course.

(2,2)

**C-070 Communications I**

This course reviews basic grammar skills and develops effective communication skills including human relations aspects.

(5)

**C-071 Communications II**

This course further develops the student's basic writing skills and expands upon the human relations aspect of effective communication.

**Prerequisite:** C-070 (5)

**C-072 Communications III**

Effective communication, both written and oral, is one of the most important aspects of working in an organization. The course provides students with an overview of the communication process, helps develop the student's listening and reading

skills, teaches techniques for using words precisely and for achieving variety in word usage, and presents techniques for planning and organizing messages.

**Prerequisite:** C-071 (5)

**C-073 Communications IV**

A continuation of Communications III. The student will apply writing techniques presented in Communications III to the different categories of business letters and memos, long reports, progress reports, minutes of meetings and agendas. In addition, the student will prepare and present a formal speech.

**Prerequisite:** C-072 (5)

**CIS 152 Introductory Computing Systems 3 CR**

Through extensive 'hands-on' experience, the student acquires skills in applying generic microcomputer applications based in the MS-DOS microcomputing environment to common business problems. Supporting discussions include hardware and software, the design and development of computer information systems and the influences of the computer within society.

(3,3)

**CIS 153 Introduction to Structured Programming 3 CR**

The development of structured solutions is emphasized. The tools of developing and expressing algorithms are utilized in developing program solutions for general applications. The programming cycle is used in depth. The student uses BASIC for program development.

(3,3)

**CIS 160 Introduction to Systems Analysis and Design 3 CR**

An introduction to the theory and methodology of structured analysis and design of business information systems. Among the many topics introduced are: the systems development cycle, the problem definition and evaluation of existing systems, characteristics of good system design, systems control, evaluation of benefits and alternatives, systems documentation, conversion and testing, implementation, follow-up and evaluation. Throughout, human relations are emphasized as well as the goals, methodology, and particular tools and techniques of a top-down approach to analysis and design of business systems.

**Prerequisite:** CIS 152 (3,0)

**CIS 170 Programming Concepts I 3 CR**

This course uses a versatile high-level programming language to illustrate and provide practice with fundamental programming principles. Students will practice techniques of methodical and detailed logic development based on the completion of design and will implement solutions in the chosen programming language.

**Prerequisites:** Math 155, CIS 152 (4,2)

**CIS 171 Programming Concepts II 3 CR**

This course builds upon previous training in programming concepts and emphasizes structured programming and top-down modular approaches. Major topics include: programme design techniques, development of maintainable code, documentation requirements, testing and debugging approaches, and common programming problems. Lab

## BUSINESS AND MANAGEMENT STUDIES

assignments are typical business problems which must be designed, coded, tested and documented to accepted standards.

**Prerequisites:** CIS 170 (3,3)

### **CIS 180 Computing Applications in Business 3 CR**

This course discusses many of the most frequently encountered business computer applications, such as payroll, accounts payable, and general ledger. From the perspective of the computing environment, discussions will include the modular development of an application, scheduling impacts, file layouts, and relationships with other applications.

**Prerequisite:** CIS 152 (3,0)

### **CIS 181 Microcomputing Systems and Operations 3 CR**

The student acquires the skills to provide technical support for the environment, including operating systems, control language, and basic hardware troubleshooting. Software package configuration and installation are included. The concept of computer support services within an organization is discussed.

**Prerequisite:** CIS 152 (3,3)

### **CIS 250 Information Systems Project 6 CR**

This course is the culmination of the certificate programme. The student will design, develop, implement and document an operational information system. Depending upon the project, either mini- or microcomputers will be used, along with the most appropriate software. The student may be required to work in a team, depending on the scope of the project. Real cases will be developed where possible.

**Prerequisites:** All other certificate components. (0,6)

### **CIS 251 Introduction to C 3 CR**

The language C is currently the leading edge of micro-computer system development. The students utilize the language to develop solutions to technically oriented problems on a professional level microcomputer system.

**Prerequisites:** CIS 152 and CSC 109 (3,3)

### **CIS 260 Systems Analysis and Design 3 CR**

Structured techniques are utilized in constructing a new logical and a new physical system as a solution to a business problem. Comprehensive practice in a team environment is provided to reinforce earlier discussion of the tools of structured analysis and design: data flow diagrams, data structure charts, structured English, data dictionary, and data transformation descriptions. Students design an actual system, creating all the necessary reports and documentation and present their work to "management" for approval.

**Prerequisites:** CIS 160, 170 (3,3)

### **CIS 262 Project Programming 3 CR**

This course follows Systems Analysis and Design I and II and demonstrates the software development as an outcome of the earlier work. It concentrates on the design, programming, testing and documentation associated with the implementation of business information systems. Students are expected to work cooperatively in a team environment. A comprehensive case study contains loose ends, holes and outright omissions to

simulate a likely real-life situation; each team must navigate these obstacles and produce a working set of programmes.

**Prerequisites:** CIS 260, 270 (1993/1994) (0,6)  
CIS 171, 260 (1994/1995)

### **CIS 270 Programming Applications 3 CR**

The student concentrates upon the implementation of more sophisticated business programmes while working in a time-sharing environment utilizing popular high level business programming languages. Techniques of programme development are employed in a group environment, structured in a group environment, structured walk through, peer review, group development. Documentation, development standards, testing and evaluation are integral components.

**Prerequisite:** CIS 171 (3,3)

### **CIS 282 Data Base Systems 3 CR**

The student studies the theory of data base design concentrating on the relational model. Experience is gained through a series of lab exercises complementing the discussion of definition, design, data dictionaries, inquiry tools, development and management.

**Prerequisites:** CIS 260, 270 (1993/1994) (3,3)  
CIS 171, 260 (1994/1995)

### **CIS 284 Information Resource Management 3 CR**

This course provides the advanced student with an overview of emerging issues in the CIS field and an insight into the climate likely to be encountered in the business world. Topics include: DP Networks, DBMS, project management, hardware and software selection, social issues, office automation, career opportunities and professionalism. Students will learn to research a topic, organize material and lead a discussion group. As well, they will learn how to prepare themselves for informed participation, how to make positive and relevant contributions to a discussion and how to present topical material. In the process, they will become familiar with many of the leading periodicals in the industry.

**Prerequisite:** CIS 260 (3,0)

### **D-070 Dictatyping**

This course enables the student to become familiar with the various parts of the transcription machines and their operation and helps the student with spelling, word usage and grammar. Exercises are provided so that the student can become proficient in using transcription tapes to produce inter-office memoranda and letters without the need of draft copies, and to help the student with spelling, word usage and grammar.

**Prerequisite:** T-070 (5)

### **ECON 152 Canadian Macroeconomics 3 CR**

This is an introductory course which examines the major factors which influence the performance of a modern mixed economy; special emphasis is placed on economic policy-making in the Canadian context. The relevance of economics to the average citizen is also stressed. Major topics to be addressed include economic indicators, measuring economic performance, GDP, unemployment, inflation, business cycles, and government stabilization policies. The economic role of government, unemployment, business cycles, and government stabilization policies. (3,0)

**ECON 201 Principles of Economics - Microeconomics 3 CR**

This course examines the free market system's inner workings, characterized by supply and demand. Various market structures such as perfect competition, and monopolies will be studied. Time will be spent looking at ways in which the market system "fails", leading to discussion about government's role, in certain circumstances, as a possible replacement for the market system. (3,0)

**ECON 202 Principles of Economics- Macroeconomics 3CR**

Beginning with the techniques for measuring important variables like GDP, unemployment, and the price level, the course will develop a model of the economy with which various shocks can be analyzed. How the government uses its spending, taxation, and changes in the money supply to achieve economic goals will be discussed at length. By the end of the course, the student should have the ability to analyze the macroeconomic impact of most events influencing an economy. (3,0)

**ECON 251 Canadian Microeconomics 3 CR**

An introduction to the operation of individual markets, consumer/producer behaviour, and government intervention at the market level. Major topics include supply and demand, elasticity, costs to firms, and industrial organization. Throughout the course, the relevance of microeconomic theory to the average citizen will be stressed. (3,0)

**F-070 Introduction to Records Management**

This course was designed to provide students with basic training in files management to meet the entry-level files management needs of business. The course will give the student realistic practice in working with office records, including suggested time deadlines that reflect the actual demands of business offices. The ARMA rules of filing will cover: alphabetic, consecutive numeric, terminal digit numeric, subject, and geographic filing. (2)

**FIN 257 Finance I 3 CR**

This course introduces fundamental financial terms and calculations. Topics covered include: simple interest, compound interest and annuities. This course also serves as an introduction to the role of financial management and the environment in which it operates. It covers the basic concepts in asset valuation and financial decision making, covering such topics as taxation, financial markets and securities. The computer lab component will utilize Lotus 1-2-3 software. Prerequisite: ACC 152. (3,1.5)

**FIN 258 Finance II 3 CR**

This course further explores various aspects of corporate financing as well as management and control of corporate assets. Topics include: short-term financing, trade credit, cash, receivables, inventory management and cash flow forecasting. The computer lab component will utilize Lotus 1-2-3 software. Prerequisite: FIN 257 (3,1.5)

**L-070 Introduction to Legal Office Procedures**

This course will provide the student with a basic background to Canadian law, introduce the Canadian and British Columbia Court System, and present information enabling the

student to prepare general legal documentation. The student will also learn about the role and responsibilities of a legal secretary, a lawyer and all the other support staff who work in the legal profession.

**Prerequisite:** T-070 (3)

**L-071 Legal Processes I**

The student will learn the required theory to apply the procedures within conveyance and litigation. Regarding conveyance, discussions will include the types of land ownership, the documentation required to transfer title to real property and initiate statements of adjustment. Within litigation, the student will study the various systems of courts, distinguish between their appropriate jurisdictions, and differentiate between civil and criminal court actions. The theory will be complemented by a comprehensive set of applied exercises covering the processes from initiation to completion.

**Prerequisite:** L-070 (10)

**L-072 Legal Processes II**

The student will learn three sets of legal processes: divorce and family matters, corporate structures, and wills and estates. Study will include the preparation of routine documents and the supporting theoretical framework.

**Prerequisite:** L-071 (12)

**LAW 294 Business Law 3 CR**

This course introduces students to fundamental legal concepts, principles, and issues that are relevant to Canadian business. It also promotes an understanding of how these legal concepts and issues are applied to specific problems in business. Topics include: an introduction to the Canadian legal system, the law of torts, and the law of contract. An in-depth investigation is then made in specific areas of contract and business law, including: sale of goods contracts, employment contracts, the law of agency, corporations, secured transactions, the law of real property and mortgages, and negotiable instruments. (4,0)

**MATH 157 Business Statistics 3 CR**

This course introduces the student to basic statistical methods for analyzing both quantitative and qualitative information, including graphic methods, sampling, descriptive statistics and differential statistics. The relationship of statistics to research methods is discussed, applications to business decisions is stressed.

**Prerequisite:** MATH 155 (3,0)

**MGT 151 Management I 3 CR**

An introduction to the principal functions of modern management. Topics include: organizational objectives, planning, decision making, organizing, staffing, as well as organizational change. Students will obtain a good understanding of how an organization functions and will develop their skills in analyzing, communicating, deliberating and proposing solutions to typical business problems. (3,0)

**MGT 152 Management II 3 CR**

This course continues the study of functions of management introduced in Management I, and provides further insight into the practice of management. Topics include: the functions of

## BUSINESS AND MANAGEMENT STUDIES

direction and control, communication, supervision, and leadership.

**Prerequisite:** MGT 151 (3,0)

**MGT 254 Applied Group & Leadership Skills 3 CR**  
Teamwork is a vital part of organizational life. Participating effectively in teams requires the ability to use leadership skills when appropriate. Areas covered include: group dynamics, communication in groups, conflict management and problem solving. Classroom participation and discussion are a necessary part of this course.

**Prerequisite:** AIS 151 (3,2)

**MGT 255 Small Business Development 3 CR**  
This course is specifically designed to provide students with the knowledge required in starting-up and successfully operating a small business. Topics include: business structures, location and market assessment considerations, business plans and methods of financing, government obligations, franchising, strategic planning and control. Case studies and simulations are used in the course. (2,2)

**MGT 256 Entrepreneurial Development 3 CR**  
A study of entrepreneurship including the various methods and support systems required to successfully launch a new venture, product or system. Consideration is given to methods required for both new and existing enterprises. This course draws together the many skills of various programmes culminating in an interdisciplinary project. (2,2)

**MGT 261 Human Relations in Business 3 CR**  
This course is designed to develop an awareness of the importance of human relations skills in the organization. Topics covered include: managerial assumptions about human behaviour, personality, occupational maladjustment (stress, job burnout), perception, motivation, communication skills, leadership, effective management, interviewing, performance appraisals, conflict and problem solving, time management, and decision making. Human relations skills will be examined through lectures, discussion and laboratory assignments. (3,0)

**MGT 262 Organizational Behaviour 4 CR**  
Information extracted from various areas of psychology (social, industrial/organizational) and management will be utilized to study the nature of work, people and organizations. Topics include: leadership motivation, group dynamics, communication, Japanese management, job design, organizational design, culture and climate, organizational change, power, stress and time management, and human resource management/development issues. Organizational behaviour will be examined through lecture, discussion and practical applications of learned materials. (4,0)

**MGT 263 Personnel 3 CR**  
An introduction to personnel management including organization of the personnel functions: recruitment and selection, interviewing and counselling, job descriptions and evaluation, compensation and salary administration, management development and performance appraisal, training and manpower planning, safety and occupational health. The course places particu-

lar emphasis on the practical application of personnel policies and procedures, on personnel's relationship to management and management's responsibilities to employees. (3,0)

**MGT 264 Industrial Relations 3 CR**  
An introduction to the fundamental issues of labour/management relations in Canada. Topics include the roles assumed by labour unions, management and government bodies, the processes involved in collective bargaining such as negotiation, mediation, conciliation, grievance and arbitration, contract interpretation and administration as well as discipline procedures. (3,0)

**MKT 152 Principles of Marketing 3 CR**  
This course is an introduction to marketing activities in modern business firms. The major topics covered are strategic planning, target markets and segmentation, consumer behaviour, research and information systems, and the marketing mix. Throughout the course, emphasis is on the application of concepts and perspectives to current business problems and opportunities, through case studies and projects. (3,0)

**MKT 251 Marketing Management Theory and Applications 3 CR**  
The analysis of marketing management as it relates to marketing opportunities, marketing planning and product strategy. The decision making responsibilities of the marketing manager are examined with particular emphasis on market research, demand analysis, cost analysis, and market planning and development. Case studies and computer based simulations are used extensively throughout the course. **Prerequisite:** MKT 152 (3,2)

**MKT 266 Advertising 3 CR**  
This course focuses on planning the advertising campaign. Topics include the creation of copy, media use, and evaluation of the efficiency and effectiveness of ads and campaigns. **Prerequisite:** MKT152 (3,0)

**MKT 271 Consumer Behaviour 3 CR**  
A study of the various influences affecting the consumer in the purchasing process. Economic and demographic factors will be among the many considerations examined. The consumer decision making process and its implication on a company's market research design, data collection and interpretation process will be covered. **Prerequisite:** MKT 152 (3,0)

**MKT 272 Marketing Research Methods 3 CR**  
This is an introductory course in marketing research. Topics include research design, data collection, sampling, and data analysis. The class will carry out a marketing research project, beginning with a problem analysis, and leading to a final research report. **Prerequisite:** MATH 157 (3,2)

**MKT 276 Retailing and Merchandising 3 CR**  
This course will examine the field of retailing, with particular emphasis on the application of marketing concepts, approaches and methods. Topics include: understanding retail target markets, buying, merchandising and promoting for

retail markets, creation of an exciting retail environment, and financial management.

**Prerequisite:** MKT 152 (3,0)

**MKT 281 Personal Selling 3 CR**

An introduction to personal selling. A practical course emphasizing role playing, case studies and write-ups as a means to developing selling skills. Subject areas will include communications principles, buyer behaviour, prospecting potential customers, sales presentations, overcoming objections and closing the sale.

**Prerequisite:** MKT 152 (3,0)

**P-070 Office Procedures**

This course introduces the student to a variety of office procedures including banking and financial management, data processing, meetings and conferences, postal services, reprographics, telephone and telecommunications, travel arrangements, and word processing. (5)

**P-071 Secretarial Procedures**

Using information from the text and varied reference materials, the students will acquire and apply secretarial knowledge and skills in simulated office environments. This course polishes secretarial skills and provides realistic office experiences. Skills developed will include editing, proof-reading, composition, and computational skills.

**Prerequisite:** T-072 (10)

**T-050 Typing Skill Development I**

This course concentrates on speed and accuracy development. (5)

**T-051 Typing Skill Development II**

This course further develops keyboarder's speed and accuracy to industry standards. (5)

**T-070 Keyboarding I**

A basic beginner and/or refresher course in typing skills. Exercises include basic keyboarding, centering, and tabulations. (5)

**T-071 Keyboarding II**

A continuation of Keyboarding I, the student will perform exercises including business communications, manuscripts, bibliographies and footnotes. A minimum typing speed of 40 w.p.m. is required.

**Prerequisite:** T-070 (5)

**T-072 Advanced Keyboarding**

This is an advanced typing course using electronic typewriters with memory features. Material covered includes advanced applications in centering, tabulations, business letters, business forms, and manuscripts.

**Prerequisite:** T-071 (10)

**TAX 361 Taxation I 4CR**

This course deals with all aspects of taxation in Canada. Municipal, Provincial and Federal taxation is covered. Specific topics include: income tax, sales tax and customs and excise taxes.

**Prerequisite:** ACC 252 (4,0)

**TAX 362 Taxation II 4CR**

A continuation of Taxation I, specifically concentrating upon applications within the corporate environment.

**Prerequisite:** TAX 361 (4,0)

**TCOM 190 Technical Communications I 3CR**

This course introduces students to the fundamentals of professional business communications. Upon completion of this course, students will be able to properly compose internal and external written communications in various business formats. This is a practical course involving a substantial number of assignments. In addition students will make several prepared as well as impromptu, oral presentations to develop speaking skills through practice.

**Prerequisite :** ENGL 155 (2,2)

**TCOM 191 Technical Communications II 3CR**

This course introduces students to the principles and practice of formal report writing. Upon completion of the course students will be able to plan, research, and present business projects in appropriate formats. In addition students will make several prepared as well as impromptu oral presentations to develop speaking skills through practice.

**Prerequisite :** TCOM 190 (2,2)

**W-070 Word Processing**

In this hands-on course, students learn to operate one word processing system, from the basic operation to advanced features. Topics covered include preparation of form letters from a mailing list, formatting, pagination and repagination.

**Prerequisite:** T-071 (10)

**W-071 Microcomputer Applications I**

The student will be introduced to the applications in integrated microcomputing in business by working through self-paced instructional guides dealing with DOS and word processing. (5)

**W-072 Microcomputer Applications II**

A continuation of W-071, this course provides an introduction to database, spreadsheet and graphics applications using the integrated package introduced in W-070.

**Prerequisite:** W-071 (5)



# BUSINESS ADMINISTRATION TRANSFER GUIDE

Students are responsible for verification of course equivalency with the accounting bodies. Minimum Grade required is C + for all courses.

<p><b>SOCIETY OF MANAGEMENT ACCOUNTANTS OF B.C.</b></p> <p><b>(CMA)</b></p>	<p><b>Accounting Technologist and Pre Professional Programme</b></p> <p>(111) Introductory Accounting                  (122) Commercial Law                  (123) Organizational Behaviour                  (212) Economics                  (214) Computerized Information Systems                  (229) Intermediate Accounting I                  (241) Management Accounting I                  (324) Taxation                  (332) Quantitative Methods                  (339) Intermediate Accounting II                  (341) Management Accounting II                  (441) Management Accounting III                  (442) Financial Management                  (451) Accounting Information Systems                  (452) Internal Auditing                  (501) Management Accounting IV                  (502) Advanced Financial Accounting                  (503) Management Policy</p>	<p><b>CNC Course Requirements</b></p> <p>ACC 151/152 or COM 204                  LAW 294                  COM 222 or MGT 262 or MGT 254                  ECON 201/202 or ECON 152/251                  CIS 150 or CIS 152                  ACC 251/252                  ACC 255/ACC 256/TCOM 191 or COM 212/TCOM 191                  TAX 361/362                  MATH 157                  ACC 251/252                  ACC 255/ACC 256/TCOM 191                  Note 1                  FIN 257/258                  CIS 160                    ACC 354</p>
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<p><b>CERTIFIED GENERAL ACCOUNTANTS OF B.C.</b></p> <p><b>(CGA)</b></p>	<p><b>Programme 90</b></p> <p>(FA1) Financial Accounting I                  (EC2) Economics                  (ME1) Managerial Mathematics &amp; Econ.                  (FA2) Financial Accounting II                  (QM2) Quantitative Methods 2                  (MAI) Managerial Accounting I                  (FA3) Financial Accounting III                  (FNI) Finance I                  (MSI) Management Information Systems I                  Public Speaking                  Business Writing                  (LWI) Law I                  (ECI) ECON I</p>	<p><b>CNC Course Requirements</b></p> <p>ACC 151/152 or COM 204                  ECON 202 or 152                  MATH 157 and (ECON 201 or 251)                  ACC 251/252                  COM 209/210                  ACC 255/256 or COM 212                  ACC 251/252                  FIN 257/258                  CIS 150/151 Note 2                  Note 3                  TCOM 190/191                  Note 4                  Note 5</p>
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<p><b>INSTITUTE OF CHARTERED ACCOUNTANTS OF B.C.</b></p> <p><b>(ICABC)</b></p> <p><b>(CA)</b></p>	<p><b>ICABC Programme</b></p> <p>Introductory Financial Accounting                  Intermediate Financial Accounting                  Advanced Financial Accounting                  Introductory Management Accounting                  Cost Accounting                  Finance                  Computers                  Management Information Systems                  Commercial Law                  Mathematics                  Probability / Statistics                  Economics                  Organizational Behaviour                  Introductory Tax</p>	<p>ACC 151/152 or COM 204                  ACC 251/252                  ACC 353/354                  ACC 255/256                  ACC 371                  FIN 257/258                  CIS 150 &amp; 151 or CIS 152                  CIS 160                  LAW 294                  MATH 101/102                  MATH 157 or COM 209/210                  ECON 201/202 or ECON 152/251                  COM 222 or MGT 254 or MGT 262                  TAX 361/362</p>
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<p><b>PROFESSIONAL INSTITUTES</b></p>	<p>Transfer credit has been established previously with the following institutions:</p> <ul style="list-style-type: none"> <li>• Canadian Institute of Traffic and Transportation</li> <li>• Institute of Canadian Bankers</li> <li>• Purchasing Management Association of Canada</li> <li>• Real Estate Institute of Canada</li> </ul> <p style="text-align: center;"><b>Students are advised to consult with these associations prior to course registration.</b></p>
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# COLLEGE FOUNDATION PROGRAMMES

## Divisional Contact:

**Marcia Timbres**  
**Chair, College Foundations**  
**Telephone: (604) 561-5823**

- Adult Basic Education (ABE)
- Developmental Studies Centre (DSC)
- English as a Second Language (ESL)
- General Education Development (GED)
- Volunteer Adult Literacy Tutoring (VALT)

**College of New Caledonia**  
**3330 - 22nd Avenue**  
**Prince George, B. C.**  
**V2N 1P8**

**Tel: (604) 562-2131**

The College Foundation programmes are designed for people seeking to acquire basic language and literacy skills, to complete a secondary school education equivalent, or to acquire the skills prerequisite to College programmes. They prepare students for admission to vocational training, post-secondary studies and/or for employment requiring completion of a secondary school education.

All components of College Foundation programmes are offered at the Prince George Campus, and many are offered at the Regional Centres. Information on regional programmes may be obtained by contacting the Regional Centres directly.

## ADULT BASIC EDUCATION (ABE)

The ABE programme framework includes four levels of certification and five levels of course work. The four certificate levels include:

- **ABE Fundamental Certificate:** Granted after completion of coursework in English 020 and Math 020;
- **ABE Intermediate Certificate:** Granted after completion of Math 030 or 035, English 030, Science 030 or 035, Canadian Studies 030;
- **ABE Advanced Certificate:** Granted after completion of English 045, Math 044 or 045, one Science and one other 045 course;
- **ABE Provincial Diploma:** Granted after completion of English 050, Math 044 or 045 plus three options at the 050 level or equivalents.\*

*\* Applicants are advised to consult with a counsellor regarding courses required for each certificate/diploma and for assistance in choosing the most appropriate options to achieve specific goals.*

## Programme Length

The programme is based on competence in specific skills. Generally, courses run four to four and one half months in length. For start dates contact the Counselling and Academic Advising Centre or Admissions Office.

## Admission Requirements

Applicants must be at least 18 years of age. A placement test must be completed prior to admission in order to assign appropriate course work.

In cases where the admission requirements or course prerequisites have not been met, special admission to a programme or course may be granted upon written recommendation by a counsellor and the coordinator, and upon authorization by the programme Divisional Chair.

*\* For intake information for regional campuses please contact your regional office.*

### **Application Procedure**

Application forms are available at the Office of Admissions and Registration and may be submitted at any time. Admission to day programmes occurs in September and January. Intakes occur in selected Fundamental or Intermediate levels in November and March. Evening ABE courses typically begin in September and January.

Students completing one level of course work in eight weeks or less will have their tuition fees applied to the cost of the next level.

### **Attendance Policy**

A student who accumulates five days of unexcused absences may be terminated from the course, by the Division Chair, upon the Instructor's recommendation.

## **ABE - FUNDAMENTAL**

### **English 010 Basic Literacy**

This course covers language skills, spelling, vocabulary and reading development up to the Grade 6 level. This is not a course for English as a Second Language students unless they are referred by an English as a Second Language Instructor. At CNC locations where an appropriate ESL course is not available clients may be considered for ABE courses on an individual basis.

**Prerequisite:** As evaluated by a placement test or teacher's recommendation.

### **Math 010 Whole Number Arithmetic**

This course is an introduction to basic arithmetic, including addition, subtraction, multiplication, and division of whole numbers.

**Prerequisite:** Adequate reading and comprehension level for text required, as evaluated by placement test and instructor interview, with final determination by ABE department.

### **English 020 Basic Preparatory English**

A course in English including fundamental skills in reading, writing and grammar. This is not a course for English as a Second Language students unless they are referred by an English as a Second Language Instructor. At CNC locations where an appropriate ESL course is not available clients may be considered for ABE courses on an individual basis.

**Prerequisite:** English 010 or as evaluated by a placement test.

### **Math 020 Basic Preparatory Mathematics**

This course is a review of basic operations in whole numbers, basic operations with fractions, decimals, and percent, as well as an introduction to metric measurement, geometry, and graphing.

**Prerequisite:** Math 010 or as evaluated by a placement test.

**ABE - INTERMEDIATE**

**English 030 Intermediate Preparatory English**  
 ABE Intermediate English is designed to provide students with the communication skills needed to enter higher level courses or to satisfy personal or career goals. This course focuses on the following core areas: composition and grammar, literature, interpersonal communication, reading comprehension and study skills.

**Prerequisite:** English 020 or as evaluated by a placement test.

**Math 030 Intermediate Algebraic Mathematics**  
 This course includes an introduction to the metric system, ratio and proportion, roots and powers, manipulation of formulas, an extensive introduction to algebra, basic geometry, graphing, and right angle triangle trigonometry.

**Prerequisite:** Math 020 or as evaluated by a placement test.

**Math 035 Intermediate Business Mathematics**  
 This course includes an introduction to the metric system, ratio and proportion, basic geometry, a brief introduction to algebra, plus business topics which include budgeting, interest, and retail transactions.

**Prerequisite:** Math 020 or as evaluated by a placement test.

**General Science 031**  
 This course is an introductory study of Human Biology and Earth Science for students who are not interested in further science study. General Science is not a valid prerequisite for Biology 045 and 050, Chemistry 045 or Physics 045.

**Prerequisites:** English 020 and Math 020, or as evaluated by the ABE placement test.

**Corequisite:** Math 030 or 035

**Intermediate Science 035**  
 This course covers units on introductory chemistry, pollution, introductory biology, nutrition, weather and simple machines. Intermediate Science 035 is not a valid prerequisite for Biology 045 and 050, Chemistry 045, or Physics 045, but it can be used as the science requirement for an ABE Intermediate Certificate.

**Prerequisites:** English 020 and Math 020 or as evaluated by the ABE placement test.

**Corequisite:** Math 030

**Science 030 (Biological Stream)**  
 This course is an introductory study of Chemistry and Biology consisting of selected topics relating to science. It fulfills the prerequisite requirements for Biology 045 and 050 and Chemistry 045; however, it is not valid as a prerequisite for Physics 045.

**Prerequisites:** ABE English 020 and Math 020 or as evaluated by the ABE placement test.

**Prerequisite or Corequisite:** Math 030.

**Science 030 (Physical Stream)**  
 This course is an introductory study of the interaction of matter and energy to cause change. This course consists of selected topics in introductory Chemistry and Physics. Physical Science 030 fulfills the prerequisite requirements for Chemistry 045 and Physics 045 but is not valid as a prerequi-

site for Biology 045 or 050.

**Prerequisite:** English 020 and Math 020, or as evaluated by a placement test.

**Prerequisite or Corequisite:** Math 030

**Canadian Studies 030**  
 The goal of the Canadian Studies course is to help students develop their knowledge of social and political issues and increase their general knowledge of Canada through the study of Canadian history and government, immigration and multiculturalism in Canada, and the Canadian economic system. Gaining an understanding of Canada enables students to become more informed and active members of their community and citizens of Canada.

**Prerequisite:** English 020 or as evaluated by a placement test.

### ABE - ADVANCED

#### **Biology 045    Advanced Preparatory Biology**

A lab-oriented course dealing with the basic elements of biology. An emphasis will be placed on the study of evolution and ecology, and will include a survey of the diversity of plant and animal life.

**Prerequisites:** Science 030 (Biological Stream), successful completion of an introductory science course such as Science 10 in the last three years, or by permission of the instructor; Math 030 or as evaluated by the ABE placement test.

#### **Chemistry 045    Advanced Preparatory Chemistry**

This course covers such topics as measurements, states of matter, composition of matter, structure of the atom, periodic table, bonding, naming compounds, formula writing, mole and composition problems, equations and calculations and solutions, and introductory organic chemistry.

**Prerequisites:** Math 030; Science 030 (Physical Stream or Biological Stream) or Science 10 in the last three years; or as evaluated by a placement test.

**Corequisite:** Math 044 or Math 045

#### **English 045    Advanced Preparatory English**

The course includes reading, writing, speaking and listening skills. Extensive writing and research skills are taught. There is a literature component, as well as a section on interpersonal communication skills.

**Prerequisite:** ENGL 030 or as determined by a placement test.

#### **Math 044    Advanced Developmental Mathematics**

The course includes math for science, number and number operation, geometry, algebra - linear and quadratic equations, inequalities, factoring polynomials, simplification, addition, subtraction, multiplication and division of rational expressions. It covers the algebra skills necessary for the nursing programme without the rigor of Math 045.

**Prerequisite:** Math 030 or as evaluated by a placement test.

#### **Math 045    Advanced Algebraic Mathematics**

This course includes a core of algebra, factoring, radicals, exponents, graphing, solution of linear, simultaneous and quadratic equations, and formulas and trigonometry.

**Prerequisite:** Math 030 with a grade of B or better, permission of the instructor, or as evaluated by a placement test.

#### **Physics 045    Advanced Preparatory Physics**

Basic Physics at a Grade 11 level. Topics include mechanics, heat, electricity, magnetism, and light.

**Prerequisites:** Math 030 or Math 10 or as evaluated by a placement test.

**Prerequisite or Corequisite:** Math 045 or Math 11.

#### **Canadian Studies 045**

This course looks at Canada's role in contemporary society and examines a number of global issues such as population, food supplies, urbanization and environmental damage and their effect on Canada.

**Prerequisite:** English 030 or as evaluated by a placement test.

#### **Computer Studies 045**

An introductory computer studies course which introduces the possibilities and limitations of the computer as a tool and introduces the student to a variety of computer applications such as word processing, data bases, and spreadsheets.

**Prerequisite:** At the 045 entry reading level and as evaluated by a placement test and Math 020.

## ABE - PROVINCIAL

### **Biology 050 Provincial Preparatory Biology**

A lab-oriented course dealing with the basic elements of biology. The emphasis will be placed on the study of cell biology, bioenergetics, genetics and human biology.

**Prerequisites:** Science 030 (Biological Stream) or successful completion of an introductory science course, such as Science 10, in the last three years or by permission of the instructor; Math 030 or as evaluated by the ABE placement test.

### **Chemistry 050 Provincial Preparatory Chemistry**

This course covers such topics as: gas laws, water, liquids and solids, energy and relationships and change of state; solutions and colloids, acids, bases and salts, oxidation-reduction reactions and electro-chemistry and organic chemistry on gas laws, plus a research paper or study on nuclear chemistry. Lab work is an integral part of this course.

**Prerequisites:** CHEM 045 or CHEM 11, Math 044 or 045.

**Note:** Placement test will be required if more than one year out of CHEM 11 and/or less than a grade of B attained in CHEM 11.

### **English 050 Provincial Preparatory English**

This course emphasizes writing, research, and communication skills. There is a strong literature component, which includes study in all literary genres.

**Prerequisite:** English 045 or as evaluated by a placement test.

### **Math 050 Provincial Preparatory Algebraic Mathematics**

This course is a continuation of Math 045. Topics include polynomials, equations, functions systems of equations, series and sequences, imaginary and complex numbers, and exponential logarithmic, circular, trigonometric and inverse functions.

**Prerequisite:** Math 045 or as evaluated by a placement test.

## DEVELOPMENTAL STUDIES CENTRE

The Developmental Studies Centre (DSC) is intended to help students who have met academic requirements for their career choice and may require additional reading, writing, math, or study skills which are necessary to pursue their programmes. The Centre's services are available to students prior to, as well as during, their college studies. Assigned times are arranged to accommodate the student's academic schedule. In addition, DSC services are available to any member of the community who may wish to improve his/her Math and/or English skills.

### Admission Requirements

**Placement Testing:** All students entering career technical programmes and certain vocational programmes must take the English and Math Achievement Test (EMAT) prior to their first semester. The results of this test are used to assess and prescribe upgrading requirements for those students whose English and Math skills are weak. Students falling below the criteria for the programme in which they are enrolled are required to take developmental courses. The EMAT is administered approximately once per month. For more information contact the Developmental Studies Centre (Prince George Campus) or any Regional Centre office.

Students who are not required to take the EMAT, or who scored above the criteria have equal access to the Centre and are encouraged to attend.

### Course Descriptions

#### **ENGL 155 Developmental English**

Based on the results of the EMAT and the requirements of the programme in which they are enrolled, students will be assigned a course of study which is drawn from the following components:

#### **Developmental and College Reading**

A self-paced course, for students who are weak in reading, designed to help students acquire the basic reading skills needed to handle college-level material. Skills covered include information analysis, pattern recognition, drawing conclusions and inference, critical reading, and flexible reading.

#### **Basic Study Skills**

This course is designed to help the student develop a systematic method of studying. Skills demonstrated include study reading, listening to lectures, note taking, time management, review techniques, and exam writing.

#### **Writing**

This course is designed to help the student acquire the basic skills of writing. Students are assigned work on punctuation, grammar, style, methods of organization, sentence structure, etc.

### Spelling

This course helps the student to apply basic spelling rules and to spell commonly misspelled words.

### Math 155 Developmental Mathematics

Based on the results of the EMAT and the requirements of the programme in which they are enrolled, students will be assigned a course of study which is drawn from the following components:

#### Fundamental Arithmetic

Fundamental Arithmetic includes whole number operations, decimals, fractions and mixed numbers, ratio and proportion, percent and simple graphs.

#### Fundamental Algebra

Fundamental Algebra is a review of signed numbers, fundamental operations in algebra, linear equations with one and two variables, special products and factoring, algebraic fractions, exponents and applications involving formulas.

#### Intermediate Algebra

Intermediate Algebra covers manipulating and deriving formula, solving complex linear equations, graphing linear equations, solving systems of equations with two and three variables, using exponents and roots involving radicals, as well as solving inequalities and sets.

## ENGLISH AS A SECOND LANGUAGE

### Admission Requirements

Applicants must be at least 18 years of age, and may be asked to have an interview with an instructor.

### Application Procedure

Application forms are available at the Office of Admissions and Registration and may be submitted at any time. Courses generally start in September and March. Additional courses may be started during the year in response to demand. Further information on the courses offered may be obtained by contacting the Admissions Office at 561-5801 or the Regional Centres.

### Course Descriptions

Two courses of "*English as a Second Language*" are offered based on demand. They are designed to assist new Canadians who have difficulty reading, writing, or speaking English.

#### ENGL 011

This is a full-time six month course (30 hours per week). It provides non-native speakers of English with basic oral and written skills. The course equips the student with the skills necessary to carry out tasks such as making appointments, getting a driver's license, searching for a job, etc.

**Prerequisite:** Literacy in native language and knowledge of the English alphabet.

#### ENGL 012

This full time course improves the speaking, reading, and writing skills of those who already have a basic knowledge of English or who have taken the English 011 course.

**Prerequisite:** Basic speaking, writing and reading skills.

## GENERAL EDUCATION DEVELOPMENT (GED)

The General Education Development (GED) tests are used to assess whether an individual meets the basic academic skills required to obtain a secondary school (Grade 12) equivalency certificate. This certificate is often used for employment, job advancement, and admission to educational programmes. The tests evaluate writing, social studies, science, reading, and mathematic skills. As this certificate may not meet certain College programme requirements, a counsellor should be consulted to obtain clarification.

### Admission Requirements

Applicants must meet the following three requirements at the time of application:

1. Be at least 19 years of age;
2. Be a British Columbia resident for at least six months immediately prior to the application date;
3. Be out of school for at least one full academic year.

### Application Procedure

Application forms are available at the Office of Admissions and Registration and may be submitted at any time.

### GED Preparation Course

This seven to eight week preparatory course is designed to prepare adults to pass the GED successfully. It emphasizes Mathematics and English to the Grade 12 level. An approach to exam writing is also presented. Counselling advice regarding post-secondary options is available. *This course is not prerequisite to writing the GED examination.*

The GED tests are administered at all campuses. Preparation classes are held prior to each test. Further information may be obtained by calling the Main Campus at 561-5801, or a Regional Centre office.

## VOLUNTEER ADULT LITERACY TUTORING (VALT)

(Prince George, Quesnel, Vanderhoof, Burns Lake, Mackenzie, McBride)

This programme accepts students who are non-readers as well as those who wish to improve their basic literacy skills. Students receive free private one-to-one instruction, from a trained volunteer literacy tutor. Time and place of instruction can be arranged to accommodate the student. Programmes are individually designed for each student, and often serve as a "bridge" to other College programmes. Students who achieve success in this programme are those who are able to work independently on assigned materials between tutoring sessions.

### Admission Requirements

Students must be at least 18 years of age, and must personally recognize the need to acquire or improve basic literacy skills. Other requirements may apply. Applications may be submitted any time between September and May. Contact the VALT office at 561-5835, or a Regional Centre office for further information.





## HEALTH SCIENCE PROGRAMMES

### Divisional Contacts:

**Fran Cotton**  
Chair, Dental Studies  
Telephone: (604) 561 5841

- Dental Assisting
- Dental Hygiene

**Patrick Storey**  
Chair, Human Services  
Telephone: (604) 561-5837

- Home Support/Resident Care Attendant  
(previously the Long Term Care Aide/Home Support Worker)

**Judith McGillivray**  
Chair, Nursing  
Telephone: (604) 561-5841

- Nursing

College of New Caledonia  
3330 - 22nd Avenue  
Prince George, B. C.  
V2N 1P8

Tel: (604) 562-2131

### DENTAL ASSISTING

The one year Dental Assisting Certificate programme combines lectures and clinical practice in preparation for a career in private practice, dental clinics, and other public health facilities.

Students gain extensive clinical experience throughout the programme. In addition to working at the CNC Dental Clinic (open to the general public), the curriculum includes a six week practicum of full-time work in a dental office.

The programme is accredited by the Commission on Dental Accreditation of Canada, hence the graduates are eligible for registration with the College of Dental Surgeons of British Columbia.

#### Career Opportunities

Chairside Dental Assistants work under the supervision of a dentist and assist in all dental office procedures. The person with ability to accept direction and supervision from others, with a sincere interest in people and with the ability to work well with others can find great satisfaction as a Dental Assistant.

The Certified Dental Assistant also works under the supervision of a dentist and may perform all of the duties of the chairside assistant as well as several additional duties which he/she must be licensed to perform.

#### Admission Requirements

1. Successful completion of Grade 12 with English 12 and Biology 12 or BIO 050, or ABE Advanced Certificate with Biology 12 or BIO 050, or GED Certificate with Biology 12 or BIO 050 (BIO 12 or BIO 050 with a grade 'C' or better recommended);

*Note: Effective September 1994, BIO 12 or BIO 050 with a grade of 'C' or better required.*

2. A medical examination including TB test, dental report, and up-to-date immunization and hepatitis vaccine.
3. Some experience, volunteer or paid, in a dental office/clinic is very beneficial. Applicants should include a statement describing the length, type and location of previous dental experience. Applicants with no previous dental experience may wish to consider the Introduction to Dentistry course offered by the College (See DENO 150 Course Description). As an alternative to DENO 150, the Introduction to Dental Assisting is offered by the Open Learning Agency (OLA) (1-800-663-9711).

*Note: In addition to disbursements for tuition, textbooks, and uniforms, students will be expected to purchase miscellaneous clinic supplies and to cover the cost of First Aid and CPR training. Specific information regarding the purchase of instruments, equipment, clinical attire, textbooks and other items will be provided during the first week of class.*

## Selection Criteria

1. Overall Grade Point Average contributes its actual points - e.g., a GPA of 3.2 will contribute 3.2 points to the selection process.
2. Biology 12 or Biology 050 Grade Point Average contributes its actual points - e.g., a GPA of 3.0 will contribute 3.0 points to the selection process.
3. Geographic Location
  - a) North of 100 Mile House contributes 2 points to the selection process.
  - b) Outside of the Fraser Valley including North Island contributes 1 point to the selection process.
  - c) Fraser Valley, Greater Vancouver and Lower Vancouver Island contributes 0 points to the selection process.
4. Persistent interest in the programme as a result of continuing applications contributes 1 point to the selection process.
5. Relevant work or volunteer experience such as volunteer work, completion of Deno 150, chairside experience, Introduction to Dental Assisting offered by OLA or completion of Dental Receptionist programme contributes 1 point to the selection process.

Maximum Points Available = 12

## Application Procedure

Application forms are available from the Office of Admissions and Registration and may be submitted after September 15 for the following year. Applicants are advised to submit their applications as early as possible in the academic year. Acceptance into the programme commences May 1st for the intake in September. (Applications must be completed before April 30 to be considered in the selection process).

## Programme Outline:

### Dental Assisting

Subjects covered include:

- Head and Neck Anatomy
- Oral Anatomy
- Oral Microbiology
- Communications
- Histology
- Preventive Dentistry
- Restorative Dentistry
- Radiology
- Dental Materials
- Dental Photography
- Periodontics
- Oral Pathology
- Oral Surgery
- Removable Prosthetics
- Fixed Prosthetics
- Orthodontics
- Diet and Nutrition
- Ethics and Jurisprudence
- Pain and Anxiety Control
- Office Practice Management
- Endodontias

## DENTAL HYGIENE

The two year Dental Hygiene Diploma programme provides training in the application of preventative and therapeutic methods of oral disease control, and in the promotion of oral health. It combines lectures and clinical experience acquired in the CNC (see Dental Assisting) Dental Clinic under the supervision of faculty. All programme requirements must be completed within five years of initial enrollment.

## Career Opportunities

The dental hygienist has many employment settings from which to choose. The services of the dental hygienist are utilized in general and specialty practices, in the armed forces, in programmes of public health, school health, industrial health and teaching. The scope of dental hygiene practices is expanding with increasing opportunities for employment in non-traditional settings.

Dental Hygiene is a young and viable profession and the dental hygienist is one of the key members of the modern dental health team.

## Admission Requirements

1. First year University level: Package 2E
  - Biology
  - Chemistry
  - English
  - Psychology
  - Math (or another option)
2. A medical examination including TB test, chest X-ray, up-to-date immunization and hepatitis vaccine.
3. Some experience, volunteer or paid, in a dental office/ clinic is beneficial. Applicants should include a statement describing the length, type, and location of previous experience. Applicants with no previous experience may wish to consider the Introduction to Dentistry course offered by the College (See DENO 150 Course Description). As an alternative to DENO 150, applicants may consider taking the Introduction to Dental Assisting Programme offered by the Open Learning Agency (1-800-663-9711).

*Note: In addition to disbursements for tuition, textbooks and uniforms, students will be expected to purchase their own instruments and miscellaneous clinic supplies, and to cover the cost of First Aid and CPR training. Specific information regarding the purchase of instruments, equipment, clinical attire, textbooks and other items will be provided during the first week of class.*

## Re-admission

A student who fails a dental hygiene course once will be allowed to apply for re-admission. A subsequent failure in any dental hygiene course will exclude the student from further study and re-admission to the programme. Re-admission will be administered according to the following priorities:

## HEALTH SCIENCE PROGRAMMES

1. A student who has successfully completed the prerequisite courses and/or who, at the time of withdrawal maintained an overall grade of "C" or better, will be accorded first priority;
2. A student who has failed a dental hygiene course or who has withdrawn from the dental hygiene course with less than a "C" grade standing in the course will be accorded second priority;
3. A student requesting transfer from a dental hygiene programme at other institutions will be subject to the criteria above and will be accorded third priority;
4. A student who withdraws twice from the same course, and applies for re-admission to that course, will be accorded the lowest priority on the course's waiting list.

### Selection Criteria

1. Overall Grade Point Average in prescribed First Year University Transfer Package 2E (Math is elective) contributes its actual points - e.g., a GPA of 3.2 will contribute 3.2 points to the selection process.
2. Geographic Location
  - a) North of 100 Mile House contributes 2 points to the selection process.
  - b) Outside of the Fraser Valley including North Island contributes 1 point to the selection process.
  - c) Fraser Valley, Greater Vancouver and Lower Vancouver Island contributes 0 points to the selection process.
3.
  - a) Relevant work or Educational experience including completion of the Dental Receptionist programme, a certified Dental Assistant designation, completion of Deno 150 or Completion of Introduction to Dental Assisting offered by OLA contributes 2 points to the selection process.
  - b) Volunteer experience only contributes 1 point to the selection process.
4. Persistent interest in the programme as a result of continuing applications contributes 1 point to the selection process.

Maximum Points Available = 9

### Application Procedure

Application forms are available from the Office of Admissions and Registration and may be submitted after September 15 for admission in the following year. Applicants are advised to submit their application early in the academic year. Acceptance into the programme commences mid-June for the intake in September. Official transcripts with final grades must be submitted before May 31. Only completed applications will be considered in the selection process.

Acceptance into the programme commences mid-June. The programme starts in September.

### Programme Outline:

#### Dental Hygiene

<b>Trimester I</b>	<b>September to December</b>
BIO 115-5	Human Anatomy
DHYG 130-6	Dental Hygiene I
DHYG 132-1	Oral Anatomy
DHYG 133-3	Histology and Embryology
DHYG 135-1	Communications
DHYG 136-2	Head and Neck Anatomy
<b>Trimester II</b>	<b>December to March</b>
BIO 116-5	Human Physiology
DHYG 140-6	Dental Hygiene II
DHYG 144-2	Radiology I
DHYG 145-2	Dental Health Education I
DHYG 146-2	Dental Materials I
<b>Trimester III</b>	<b>March to June</b>
BIO 150-3	Microbiology
DHYG 150-6	Dental Hygiene III
DHYG 152-2	Periodontics I
DHYG 153-2	General Pathology
DHYG 155-2	Dental Health Education II
DHYG 157-2	Pain and Anxiety Control
<b>Trimester IV</b>	<b>September to December</b>
DHYG 230-7	Dental Hygiene IV
DHYG 233-2	Oral Pathology
DHYG 234-1	Radiology II
DHYG 235-3	Community Dental Health I
DHYG 237-3	Pharmacology
DHYG 238-3	Nutrition
<b>Trimester V</b>	<b>December to March</b>
DHYG 240-7	Dental Hygiene V
DHYG 242-2	Periodontics II
DHYG 245-2	Community Dental Health II
DHYG 246-2	Dental Materials II
DHYG 249-2	Health Promotion Issues
<b>Trimester VI</b>	<b>March to June</b>
DHYG 250-8	Dental Hygiene VI
DHYG 255-2	Community Dental Health III
DHYG 256-2	Office Practice
DHYG 259-3	Professional Issues

## HOME SUPPORT/RESIDENT CARE ATTENDANT PROGRAMME

This seventeen and a half week certificate programme provides training in home management skills and the personal care of individuals located in the community and in extended and intermediate care facilities. The programme presents theory related to health care, growth and development, and interpersonal communication, with special emphasis on the development of skills to assist patients with personal hygiene, movement, safety and nutrition.

The campus labs and clinical experience include lifting and moving clients with disabilities. It is therefore very important for the student to be in good physical condition.

The student is expected to provide their own transportation to various community agencies and long term care facilities. Approximately 50% of this programme is spent gaining practical experience at the above institutions. The schedule varies weekly and can include shifts from 6:00 a.m. to 2:00 p.m. and 3:00 p.m. to 10:00 p.m., plus numerous shorter appointments.

Students are strongly advised that a history of back problems may prevent completion of the course or success in finding and maintaining employment. The students are strongly encouraged to participate in a fitness programme while enrolled in the course.

### Career Opportunities

Employment opportunities exist for trained personnel to provide care in community agencies and long term care facilities with various agencies, group homes, school systems, and independently with clients in their home.

Employers of the graduates of this programme require workers who are eligible to be bonded. Students interested in this programme but are unsure of their bondability should make an appointment with a counsellor.

### Admission Requirements

In addition to the requirements outlined below, it is **strongly recommended** that applicants obtain a Safety Oriented First Aid Certificate prior to completing the programme. It is also beneficial for applicants to have some experience, volunteer or paid, related to the field.

1. Grade 8 reading level (at a minimum). Testing is administered by the College;
2. A medical examination, up-to-date immunization and TB testing (may be directed by the Division of TB Control of the Province of B.C.) Hepatitis B immunization is also necessary and will be started while the student is enrolled in the programme.
3. A handwritten statement describing career goals, interests related to aging and the elderly and reasons for seeking entrance into the programme (300 words) is required upon application.

### Selection Criteria

In those cases where there are more qualified applicants than available spaces, the following criteria will be used in selecting half the class:

1. Demonstration of continuing interest in entering the programme (1 point).
2. Successful completion of Safety Oriented First Aid prior to programme application (1 point).
3. Recent (within five years) educational background in a related health care programme (1 point).
4. Evaluation of **handwritten** statement describing career goals, interests related to aging and the elderly and reasons for seeking entrance into the programme (content = up to 2 points; neatness and grammar = 1 point).
5. Reading level as determined by the English and Math Achievement Test (Level 8.1 to 10.9 = 1 point, Level 11.0 and above = 2 points).
6. In the case of ties using the above criteria, the date of application will be the deciding criteria.

### Application Procedure

Application forms are available from the Office of Admissions and Registration and may be submitted after September 15th for the following academic year. Acceptance into the programme commences in mid-April for the programme beginning in August, and in mid-October for the programme beginning in January.

### Course Contents

1. Understanding the human body.
2. Health and the individual and family.
3. Role and function.
4. Responsibilities and limitations.
5. Creating a safe environment.
6. Growth and development.
7. Communication.
8. Nutrition.
9. Diseases.
10. Basic skills related to body mechanics, lifting and moving, hygiene, ambulation, nutrition, elimination, medical asepsis and temperature, pulse and respirations.

### NURSING

This twenty-two month diploma programme is offered at the Prince George and Quesnel Campuses. It provides the knowledge, and skills required to work as a Registered Nurse in health care agencies offering general medical, surgical, pediatric, maternity, psychiatric, and extended health care services. All programme requirements must be completed within five years of initial enrollment.

Graduates are qualified to write the provincial nurse registration exams, and to subsequently apply for nurse licensure in British Columbia.

#### Career Opportunities

Most nurses work in the hospital setting caring for infants, children and adults in differing types of wards, such as medical, surgical, nursery, pediatric, maternity and psychiatric. Some patients need constant help from nurses who manage technical life-saving equipment. In recent years, more nurses are working outside hospitals. They assist in health education and care of individuals in the community and in specialized branches of nursing such as health programmes in industry.

#### Admission Requirements

1. Successful completion of Grade 12 with English 12 and a grade of 'C' or better in each of Biology 12 or BIO 050, and Chemistry 12, CHEM 050, or Chemistry 114, or ABE Advanced Certificate with a grade of "C" or better in each of BIO 12 or BIO 050, and CHEM 12 or CHEM 050 or CHEM 114 or GED with a grade of 'C' or better in each of Biology 12 or BIO 050, and Chemistry 12, CHEM 050 or CHEM 114.

*Note: Students using Chemistry 114 to meet admission requirements are recommended to take Chemistry 113 prior to enrolling in Chemistry 114.*

2. All entering students must take the English Math Achievement Test (EMAT). Students who require skills upgrading are encouraged to complete remedial work prior to the first trimester;
3. A medical examination, up-to-date immunization and TB testing (may be directed by the Div. of TB Control of the Province of B.C.) and Hepatitis B vaccination. (The Hepatitis B vaccine will be supplied at no cost to the student. A minimal administration fee will be charged and immunization scheduled on entry).

#### Re-admission

A student who fails a nursing course once will be allowed to apply for re-admission. A subsequent failure in the same nursing course or a total of three failures in nursing courses will exclude the student from re-admission to the nursing programme. Students are normally expected to complete the general nursing programme requirements within five years of the date of initial enrollment.

Re-admission will be administered according to the following priorities:

1. A student who has successfully completed the prerequisite courses and/or who, at the time of withdrawal maintained an overall grade of 'C' or better, will be accorded first priority;
2. A student who has failed a nursing course or who has withdrawn from the nursing course with less than a 'C' grade standing in the course will be accorded second priority;
3. A student requesting transfer from nursing programmes at other institutions will be subject to the above criteria and will be accorded third priority;
4. A student who withdraws twice from the same course, and applies for re-admission to that course, will be accorded the lowest priority on the course's waiting list.

#### Selection Criteria

1. Biology 12 or its equivalent Grade Point Average contributes its actual points - e.g., a GPA of 3.0 will contribute 3.0 points to the selection process.
2. Chemistry 12 or its equivalent Grade Point Average contributes its actual points - e.g., a GPA of 3.0 will contribute 3.0 points to the selection process.
3. Geographic Location
  - a) North of 100 Mile House contributes 2 points to the selection process.
  - b) Outside of the Fraser Valley including North Island contributes 1 point to the selection process.
  - c) Fraser Valley, Greater Vancouver and Lower Vancouver Island contributes 0 points to the selection process.
4. Completion of a support course (or its equivalent) for the Nursing Programme will contribute one point per course. These support courses include Biology 135, 145, 155; Sociology 103, 104, 105; and Psychology 161 and 162. (Students enrolled in any of these support courses at the College of New Caledonia prior to entering the Nursing Programme are deemed to be NURSING PREPARATORY STUDENTS).

Maximum Points Available = 18.

#### Application Procedure

Application forms are available from the Office of Admissions and Registration and may be submitted after September 15th for the following academic year. Acceptance into the programme commences the end of April. The programme starts in September.

#### Registered Nurses Association (RNABC)

Under section 12 of the Nurses (Registered) Act, applicants must submit evidence of "good character." The RNABC has established the following standards, including but not necessarily limited to:

1. Satisfactory references from present or previous employers. A student applying for student membership, or registration, must provide confirmation, by a programme director or designate, of enrollment in or

- successful completion of, an approved nursing programme,
2. No record of criminal convictions,
  3. No history of dishonest behaviour or misrepresentation on an application for membership.

Further information regarding this policy may be obtained by contacting the Registered Nurses Association of B.C., 2855 Arbutus, Vancouver (736-7331).

**Programme Outline:**  
**Nursing**

The following outline describes the programme as offered at both the Prince George and Quesnel Campuses. For the Quesnel programme, trimesters IV, part of V, and/or VI may be scheduled in Prince George. Scheduling for the Quesnel programme is indicated in parentheses.

First year students may enrol on a part-time basis by taking Sociology 103, 104, 105; Psychology 161, 162; Biology 135,145,155 prior to registering for the Nursing courses.

<b>Trimester I</b>	<b>Sept. to Dec. (Dec. to Mar.)</b>
BIO 135-4	Human Anatomy
NURS 135-3	Man as an Adaptive System
NURS 137-1	Communications I
NURS 138-2	Medical Science I
PSYC 161-3	Developmental Psychology for Nurses I
SOC 103-2	Sociological Concepts & Theories I
ENGL 155	Developmental English (if required) (*)
MATH 155	Developmental Math (if required) (*)

*\* Students must receive an exempt or satisfactory standing in ENGL 155 and MATH 155. Time for remedial work will be scheduled during the first four weeks of the nursing programme.*

<b>Trimester II</b>	<b>Dec. to Mar. (Mar to Jun.)</b>
BIO 145-4	Human Physiology I
NURS 145-7	Nursing Care to Promote Adaptation I
NURS 147-1	Communications II
NURS 148-3	Medical Science II
PSYC 162-4	Developmental Psychology for Nurses II
SOC 104-2	Sociological Concepts & Theories II

<b>Trimester III</b>	<b>Mar. to Jun. (Sept. to Dec.)</b>
BIO 155-3	Human Physiology II
NURS 155-10	Nursing Care to Promote Adaptation II
NURS 157-1	Communications III
NURS 158-3	Medical Science III
SOC 105-2	Sociological Concepts & Theories III

<b>Trimester IV</b>	<b>Sept. to Dec. (Dec. to Mar.)</b>
NURS 235-8	Nursing Care to Promote Adaptation III
NURS 236-3	Ethical Dilemmas in Nursing Practice
NURS 237-1	Communications IV
NURS 238-4	Medical Science IV

<b>Trimester V</b>	<b>Dec. to Mar. (Mar to Jun.)</b>
NURS 245-10	Nursing Care to Promote Adaptation IV
NURS 246-2	Managing for Change
NURS 248-3	Medical Science V

<b>Trimester VI</b>	<b>Mar. to Jun.(Sept. to Dec.)</b>
NURS 255-10	Nursing Care to Promote Adaptation V
NURS 256-2	Professional Responsibilities
NURS 258-2	Medical Science VI

<b>Jun. to Sept. or Aug. to Dec. (Jan. to Apr.)</b>	
NURS 299-16	Clinical Preceptorship

**Course Descriptions**

**BIO 115 Human Anatomy 5 CR**  
This course is an introductory survey of the structures and functions of the anatomical systems of the human body. Lecture topics include the nature of inorganic and organic molecules, cellular biology, histology and the anatomy of the systems.

**Prerequisites:** BIO 101 and 102 or 103 and 104 (5,0)

**BIO 116 Human Physiology 5 CR**  
This course serves as a continuation of Biology 115. It deals with the physiological principles at both the cellular and system levels. Emphasis is on the importance of homeostasis and how it can be maintained by the concerted proper functioning of the body systems.

**Prerequisite:** BIO 115 (5,0)

**BIO 135 Human Anatomy 4 CR**  
This course is an introductory survey of the structures and functions of the anatomical systems of the human body. Lecture topics include the nature of inorganic and organic molecules, cellular biology, histology and the anatomy of the body systems.

**Prerequisites:** Biology 12 or BIO 050 and Chemistry 12, CHEM 050 or CHEM 114 (4,0)

**BIO 145 Human Physiology I 4 CR**  
This course deals with the physiology of the integumentary, cardiovascular, lymphatic, respiratory, reproductive and digestive systems. A series of lectures will also be given on body metabolism and nutrition.

**Prerequisite:** BIO 135 (4,0)

**BIO 150 Microbiology 3 CR**  
A study of the morphology, growth, modes of transmission, and relationship to diseases of pathogenic microorganisms. Emphasis is placed on the relationships to dental health. This course is only pertinent to students enrolled in dental programmes.

**Prerequisites:** BIO 116, DHYG 140 (3,3)

**BIO 155 Human Physiology II 3 CR**  
This course deals with the physiology of the nervous, endocrine, skeletal, muscular and urinary systems. How fluid and electrolytes are balanced in the body is also included.

**Prerequisite:** BIO 145 (3,0)

**DENO 150 Introduction to Dentistry 2 CR**  
This course provides information and practical experience in the field of dentistry. It is designed to orient students to current dental health concepts and to practicing as a part of the dental team.

(2,0)

## HEALTH SCIENCE PROGRAMMES

- DHYG 130 Dental Hygiene I 6 CR**  
A clinical and theoretical course introducing basic principles of dental hygiene care. Emphasis is placed on asepsis, initial patient evaluation/assessment, basic instrumentation and other fundamental skills associated with dental hygiene practice. Clinic sessions will be used to practice performing clinical procedures needed prior to treating clients.  
**Prerequisite or Corequisite:** BIO 115, DHYG132, 133, 135, and 136 (4,6)
- DHYG 132 Oral Anatomy 1 CR**  
This course discusses oral anatomic landmarks and an understanding of the relationship between structure and function. Emphasis is placed on tooth morphology, basic supporting structures of the mouth and occlusion and on tooth identification.  
**Prerequisite or Corequisite:** DHYG 130 (1,2)
- DHYG 133 Histology and Embryology 3 CR**  
Offers information on general and orofacial histology and embryology featuring the development of the oral cavity: histology of the teeth and supporting structures and the calcification and eruption of the teeth.  
**Prerequisite or Corequisite:** DHYG 130 (3,2)
- DHYG 135 Communications 1 CR**  
This course provides the student with the opportunity to examine the dynamics of the communication process. An overview of current theory and models of communication, together with the identification of factors which impact on communication, provide the basis for class discussion. The aim is to enable the student to effectively communicate within the dental practice environment. (1,2)
- DHYG 136 Head and Neck Anatomy 2 CR**  
A detailed study of head and neck anatomy and the relationship of these structures to the body's major organ systems. Emphasis is placed on application to dental hygiene practice.  
**Prerequisite or Corequisite:** DHYG 130 (2,2)
- DHYG 140 Dental Hygiene II 6 CR**  
A clinical and theoretical course designed to provide opportunities necessary for the development of professional skills and attitudes required for dental hygiene practice. Emphasis will be placed on developing professional values and attitudes, and problem-solving capabilities in a clinical setting with clients.  
**Prerequisites:** BIO 115, DHYG 130, 132, 133,135, and 136  
**Prerequisites or Corequisites:** BIO 116, DHYG 144, 145, and 146 (3,10)
- DHYG 144 Radiology 2 CR**  
This course has been designed to provide the student with theory in the technical aspects of radiation and principles of exposing, processing, and mounting dental radiographs. Clinical experience will emphasize radiation hygiene and technique.  
**Prerequisite or Corequisite:** DHYG 140 (2,3)
- DHYG 145 Dental Health Education I 2 CR**  
A study of content essential to familiarize the student with the methods and materials used in teaching self-care. Emphasis is

placed on health promotion and disease control for the individual. Self-care devices and techniques and other preventive dentistry techniques are reviewed.  
**Prerequisite or Corequisite:** DHYG 140 (2,0)

**DHYG 146 Dental Materials I 2 CR**  
An introductory course to acquaint the dental hygiene student with dental materials commonly used in the dental office and laboratory. Laboratory time will allow for manipulation of a variety of dental materials. Course content will also include analysis of adaptation of materials in the prevention and treatment of oral disease, and the possible effects of dental materials on human tissues.  
**Prerequisite or Corequisite:** DHYG 140 (2,2)

**DHYG 150 Dental Hygiene III 6 CR**  
A clinical and theoretical course designed to allow students to continue to develop skills necessary for the practice of dental hygiene. Clinical experiences require more complex skills in treatment and in planning.  
**Prerequisites:** BIO 116, DHYG 140, 144, 145, and 146  
**Prerequisites or Corequisites:** BIO 150, DHYG 152, 153, 155, and 157 (3,10)

**DHYG 152 Periodontics I 2 CR**  
An introductory course that discusses the structure and function of the periodontium; and reviews the development and progression of periodontal diseases. Sufficient information is presented to enable the dental hygiene student to differentiate periodontal health from disease, and to identify both local and systemic factors responsible for, or contributing to, periodontal pathology.  
**Prerequisite or Corequisite:** DHYG 150 (2,0)

**DHYG 153 General Pathology 2 CR**  
An introduction to the basics of pathology, with emphasis on the nature of disease, its causes, development, and consequences.  
**Prerequisite or Corequisite:** DHYG 150 (2,0)

**DHYG 155 Dental Health Education II 2 CR**  
A study of content essential to familiarize the student with the methods and materials in dental health education. Emphasis is placed on designing table clinics, lesson plans, and appropriate visual aids to be used in dental health education for school children and adult groups.  
**Prerequisite or Corequisite:** DHYG 150 (2,2)

**DHYG 157 Pain and Anxiety Control 2 CR**  
Introduces the dental hygienist to the basic knowledge and practical application of the study of local anaesthesia and analgesia. Course materials will include the understanding, psychology, and prevention of pain; alternate methods of pain control; pharmacology of local anaesthesia; prevention and handling of complications and emergencies.  
**Prerequisite or Corequisite:** DHYG 150 (2,2)

**DHYG 230 Dental Hygiene IV 7 CR**  
A clinical and theoretical course designed to allow for continued development of skills necessary for the practice of dental hygiene. Didactic emphasis is placed on medical emergencies in the dental environment and on the needs of

specific populations and the disabled.

**Prerequisites:** BIO 150, DHYG 150, 152, 153, 155, and 157  
**Prerequisites or Corequisites:** DHYG 233, 234, 235, 237, and 238 (3,13)

**DHYG 233 Oral Pathology 2 CR**

The principles of general pathology in relationship to the diseases of the teeth, soft tissues, and supporting structures of the oral cavity. The importance of early recognition of abnormal conditions in the mouth by the dental hygienist is emphasized.

**Prerequisite or Corequisite:** DHYG 230 (2,0)

**DHYG 234 Radiology II 1 CR**

Introduces the dental hygiene student to additional information and techniques in dental radiography. Emphasis is on the utilization of dental radiographs in dental hygiene treatment planning and in the performance and evaluation of patient care. Dental photography is also introduced.

**Prerequisite or Corequisite:** DHYG 230 (1,2)

**DHYG 235 Community Dental Health I 3 CR**

The study of dental health as a community problem with emphasis on the theory and practice of dental public health and preventive dentistry and the role of the dental hygienist in promoting dental health in community, provincial and national levels.

**Prerequisite or Corequisite:** DHYG 230 (3,0)

**DHYG 237 Pharmacology 3 CR**

The study of drugs with consideration given to those used in the practice of dentistry. The study is to acquaint the student with the origin of these drugs, their physical and chemical properties, modes of administration and effects upon the body systems.

**Prerequisite or Corequisite:** DHYG 230 (3,0)

**DHYG 238 Nutrition 3 CR**

A survey of the fundamentals of nutrition and the factors influencing the ability of the individual and family to secure and maintain optimal nutritional status. The relationship of nutrition to the practice of dental hygiene is emphasized.

**Prerequisite or Corequisite:** DHYG 230 (3,0)

**DHYG 240 Dental Hygiene V 7 CR**

A clinical and theoretical course designed to provide opportunity for the continued development of professional skills and attitudes required for dental hygiene practice. A comprehensive caries case study is assigned. Didactic emphasis is placed on dental specialties, including oral health care for the older adult and the multicultural client.

**Prerequisites:** DHYG 230, 233, 234, 235, 237, and 238  
**Prerequisites or Corequisites:** DHYG 242, 245, 246, and 249 (3,13)

**DHYG 242 Periodontics II 2 CR**

Introduces dental hygiene students to advanced knowledge and practical application of clinical periodontology. Instruction is planned to enable the dental hygiene student to formulate treatment plans, and to provide initial nonsurgical periodontal therapy and periodontal maintenance therapy; and, or to recommend referral of clients with periodontal

pathology as appropriate.

**Prerequisite or Corequisite:** DHYG 240 (2,0)

**DHYG 245 Community Dental Health II 2 CR**

A continuation of Community Dental Health I. Emphasis is on the practical application of didactic information provided through field experiences in the community, utilizing current methods relating to community dental health problems.

**Prerequisite or Corequisite:** DHYG 240 (2,3)

**DHYG 246 Dental Materials II 2 CR**

This course offers additional knowledge of dental materials and experiences in the manipulation of specific materials.

**Prerequisite or Corequisite:** DHYG 240 (2,2)

**DHYG 249 Health Promotion Issues 2 CR**

An overview of health problems that face mankind today: emotional problems, drug abuse, alcohol abuse, nutrition, diet and weight control, smoking, heart disease and stress management, to mention a few. Emphasis will be placed on the responsibilities of a dental health care professional toward promotion of general health.

**Prerequisite or Corequisite:** DHYG 240 (2,0)

**DHYG 250 Dental Hygiene VI 8 CR**

The final clinical and theoretical course in the sequence designed to concentrate on the utilization of all competencies in order to assess, plan, perform, evaluate and reassess client care. A comprehensive periodontal case study is assigned and discussed in detail in class.

**Prerequisites:** DHYG 240, 242, 245, 246, and 249

**Prerequisites or Corequisites:** DHYG 255, 256, and 259 (3,16)

**DHYG 255 Community Dental Health III 2 CR**

The final course in the Community Dental Health sequence. Emphasis is placed on community projects designed, developed and implemented by the students.

**Prerequisite or Corequisite:** DHYG 250 (2,4)

**DHYG 256 Office Practice 2 CR**

This course emphasizes effective management skills required in a dental practice. Various aspects of the business of a dental office as it relates to dental hygiene practice are highlighted.

**Prerequisite or Corequisite:** DHYG 250 (2,0)

**DHYG 259 Professional Issues 3 CR**

A lecture and seminar course designed to provide a forum for discussion about changes confronting health care professions today, with the primary focus on problems unique to the delivery of dental care and to issues facing dental hygienists.

**Prerequisite or Corequisite:** DHYG 250 (3,0)

**NURS 135 Man as an Adaptive System 6 CR**

This course introduces the student to nursing and an organized system for providing nursing care. Observation, interview, and measurement skills are introduced. Simple nursing measures will be practiced in the nursing laboratory on campus.

**Prerequisites or Corequisites:** BIO 135, NURS 137, or Co138, PSYC 161, SOC 103 (3,4,5)



## HEALTH SCIENCE PROGRAMMES

<b>NURS 137</b>	<b>Communications I</b>	<b>3 CR</b>
This course introduces therapeutic communication skills and concepts which will enable the student to begin to develop helping relationships.		
<b>Prerequisite or corequisite:</b> NURS 135 (1,2)		
<b>NURS 138</b>	<b>Medical Science I</b>	<b>5 CR</b>
This course gives an overview of microbiology at the introductory level. Norms for basic physiologic functions of the healthy individual are also taught.		
<b>Prerequisite or Corequisite:</b> NURS 135. (2,0)		
<b>NURS 145</b>	<b>Nursing Care to Promote Adaptation I</b>	<b>8 CR</b>
This course continues to develop nursing theory and introduces the student to providing nursing care for patients with simple physiological problems. Experience is provided in the campus laboratory and on medical, surgical, and/or maternity wards in a general hospital.		
<b>Prerequisites:</b> BIO 135, NURS 135, 137, 138, PSYC 161, SOC 103, ENGL 155, MATH 155		
<b>Prerequisites or Corequisites:</b> BIO 145, NURS 147, 148, PSYC 162, SOC 104 (4,9)		
<b>NURS 147</b>	<b>Communications II</b>	<b>2 CR</b>
This course introduces teaching - learning principles and their application to patient education. Theory will be practiced in campus laboratory situations.		
<b>Prerequisite or Corequisite:</b> NURS 145 (2,0)		
<b>NURS 148</b>	<b>Medical Science II</b>	<b>5 CR</b>
This course introduces the student to the concept of pathophysiology. Medical approaches to diseases are presented. Medical management for general medical-surgical and maternity patients is described. Mathematical calculations related to pharmacology will be included.		
<b>Prerequisite or Corequisite:</b> NURS 145 (4,0)		
<b>NURS 155</b>	<b>Nursing Care to Promote Adaptation II</b>	<b>7 CR</b>
This course focuses on providing the student with nursing theory to enable them to give nursing care to patients with simple problems in both physiological and psychosocial areas. Experience will be provided in the campus laboratory and on medical, surgical, and/or maternity wards, in a general hospital.		
<b>Prerequisites:</b> BIO 145, NURS 145, 147, 148, PSYC 162, SOC 104		
<b>Prerequisites or Corequisites:</b> NURS 157, 158, BIO 155, SOC 105 (4,15)		
<b>NURS 157</b>	<b>Communications III</b>	<b>1 CR</b>
This course continues to build on therapeutic communication skills and concepts which will enable the student to intervene in a supportive manner where patients are experiencing simple adaptation problems. Theory will be practiced in campus laboratory situations.		
<b>Prerequisite or Corequisite:</b> NURS 155 (1,1)		
<b>NURS 158</b>	<b>Medical Science III</b>	<b>4 CR</b>
This course concentrates on the pathophysiology of and medical approaches to diseases affecting nutrition, elimination, activity and rest and oxygen. Theory will be presented by lecture and		

class discussion.

**Prerequisite or Corequisite:** NURS 155 (4,0)

**NURS 235**      **Nursing Care to Promote Adaptation III**      **8 CR**

This course introduces the student to providing nursing care for patients with complex adaptation problems. Experience will be provided clinical areas such as in children's and maternity wards in a general hospital.

**Prerequisites:** BIO 155, NURS 155, 157, 158, SOC 105

**Prerequisites or Corequisites:** NURS 236, 237, 238 (4,16.5)

**NURS 236**      **Ethical Dilemmas In Nursing Practice**      **3 CR**

This course will provide an overview of the major ethical theories. The major focus of the course will be the presentation of a model for critical ethical analysis, and its application to specific ethical dilemmas in nursing practice. The majority of the course will be in the form of small and large group discussion.

**Prerequisite or Corequisite:** NURS 235 (3,0)

**NURS 237**      **Communications IV**      **1 CR**

This course concentrates on the development of skills students can utilize in the work phase of a helping relationship. These skills will enable them to help patients in the exploration of alternatives, confronting incongruities and generalizing new coping mechanisms to daily life.

**Prerequisite or Corequisite:** NURS 235 (1,1)

**NURS 238**      **Medical Science IV**      **4 CR**

This course concentrates on the pathophysiology of and medical approaches to neoplasms and to diseases affecting fluid and electrolyte balance and oxygenation. Psychopathology is also introduced.

**Prerequisite or Corequisite:** NURS 235 (4,0)

**NURS 245**      **Nursing Care to Promote Adaptation IV**      **10 CR**

This course continues to prepare the student to provide nursing care for patients with complex adaptation problems. Experience will be provided in medical, surgical and psychiatric settings in a general hospital. Some experience will be in extended and/or intermediate care settings.

**Prerequisites:** NURS 235, 236, 237, 238

**Prerequisites or Corequisites:** NURS 246, 248(3,19.5)

**NURS 246**      **Managing for Change**      **2 CR**

This course provides a theory base for the development of management techniques and leadership skills to assist nurses to work effectively in a variety of hospital settings. The role of the nurse as change agent and patient advocate are discussed.

**Prerequisite or Corequisite:** NURS 245 (2,0)

**NURS 248**      **Medical Science V**      **3 CR**

This course concentrates on the pathophysiology of and medical approaches to diseases affecting neurologic and endocrine function. Psychopathology related to affective disorders, substance abuse disorders and anxiety disorders are also covered.

**Prerequisite or Corequisite:** NURS 245 (3,0)

**NURS 255          Nursing Care to                                  10 CR**  
**Promote Adaptation V**

This course continues to focus on the provision of nursing care for patients with complex adaptation problems. Experience will be provided in medical, surgical and psychiatric settings in a general hospital. Some experience will be in extended and/or intermediate care settings.

**Prerequisites:** NURS 245, 246, 248

**Prerequisites or Corequisites:** NURS 256, 258(3,19.5)

**NURS 256          Professional Responsibilities                                  2 CR**  
**and Employee Role**

This course focuses on the role and responsibilities of an employee and the prevailing beliefs and values found in hospital settings. Professional responsibilities, career options and educational opportunities will also be examined.

**Prerequisite or Corequisite:** NURS 255                                  (2,0)

**NURS 258          Medical Science VI    3 CR**

This course concentrates on the pathophysiology of, and medical approaches to diseases affecting intestinal elimination, immunity, sexual and total system functioning. Psychopathology related to personality disorders, schizophrenic disorders, and organic brain disorders are also covered.

**Prerequisite or Corequisite:** NURS 255                                  (3,0)

**NURS 299          Clinical Preceptorship    16 CR**

This clinical practice course will be completed in a rural and an urban health care facility. Each student will be assigned to a preceptor and will assume the preceptor's duties under his/her guidance and supervision. Clinical experience will be provided in a medical-surgical area. Other experiences may include maternity, psychiatry and pediatrics.

**Prerequisites:** NURS 255, 256, 258                                  (0,35)

**PSYC 161          Developmental Psychology    3 CR**  
**for Nurses I**

This course introduces the study of behaviour, general psychological principles, and major theories in developmental psychology. The focus is on the physical, cognitive, social, emotional and personality aspects of human development from conception through to the end of childhood. (3.5,0)

**PSYC 162          Developmental Psychology    4 CR**  
**for Nurses II**

This course is a continuation of PSYC 161. The focus is on the physical, cognitive, social, emotional and personality aspects of human development from adolescence through to the end of adulthood.

**Prerequisite:** PSYC 161    (4, 0)

**SOC 103          Sociological Concept &    2 CR**  
**Theories**

This course introduces the basic models, theories and concepts employed in the study of sociology. Topics include culture, socialization, social movements, ethnicity and demography. (2.5,0)

**SOC 104          Sociological Concepts &    2CR**  
**Theories II**

This course is a continuation of Soc 103 with special emphasis on research methods and modes of observation used

in sociological institutions, including education, politics, religion, deviance and economics is included.

**Prerequisite:** SOC 103    (2.5,0)

**SOC 105          Sociological Concepts    2 CR**  
**and Theories III**

A continuation of Soc 104 in examining social institutions with an emphasis on related social problems and social remedies as associated with "Canadian" sociological phenomena such as racial and ethnic diversity, deviance and criminality, aging, health issues and political change.

**Prerequisite:** SOC 104    (2.5,0)

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## SOCIAL SERVICES PROGRAMMES

### Divisional Contact:

**Patrick Storey**  
**Chair, Human Services**  
**Telephone (604) 561-5837**

- Early Childhood Education (ECE)
- Social Services Training:
  - Foundations - Certificate
  - Developmental Disabilities (SSTP) - Certificate
  - Special Education Assistant/Classroom Aide Certificate or Diploma
  - Child Care and Family Support - Diploma

**College of New Caledonia**  
**3330 - 22nd Avenue**  
**Prince George, B. C.**  
**V2N 1P8**

**Tel: (604) 562-2131**

### EARLY CHILDHOOD EDUCATION

This programme provides the training required for working with young children in a variety of early childhood education settings. It integrates sixteen weeks of intensive observation and work experience with academic training.

Students who successfully complete the programme are eligible for registration with the Community Care Facilities Licensing Board of B.C. upon completion of a further 500 hours of work in an approved facility. Graduates must be at least 19 years of age to apply for registration.

#### Career Opportunities

Graduates find employment in a variety of early childhood settings: day care centres, nursery schools, parent co-operative preschools, childminding centres, centres for physically and mentally challenged children, social service agencies, libraries and hospital playrooms. Some graduates are owners of their own day care centres, nursery schools and childminding centres.

#### Admission Requirements

1. Successful completion of Grade 12 (with English 12) with a minimum 'C' or ABE Advanced Certificate plus English 050 with a minimum 'C' or GED Certificate;
2. a) Preference will be given to applicants who have successfully completed 30 hours paid or volunteer experience in an early childhood setting (e.g. day care centre; nursery school; family day home). A form signed by the programme supervisor will outline hours of work and attest to the applicant's ability as demonstrated during this experience. The signed form will accompany the completed application.  
b) A second letter of reference from an employer, educator or other professional commenting on the applicant's personal suitability for working in the field of early childhood education must accompany the completed application.
3. All entering students must write the English component of the English and Math Achievement Test (EMAT) administered by the College prior to the first semester. Students whose test results indicate difficulties in English will be required to take a developmental programme.
4. Attendance at a Spring orientation session.
5. A written statement describing career goals, special interests and reasons for seeking entrance to the programme (at least 300 words in length) must accompany the completed application.
6. A medical examination including a TB test and up-to-date immunization.
7. A criminal record check must be completed before a student enters practicum.

**Application Procedure**

Application forms are available at the Office of Admissions and Registration and may be submitted after September 15 for the following year. Applicants are advised to submit their application early in the academic year. Applications should be completed by April 30 to be eligible for the first selection process. Acceptance into the programme commences mid-May for the intake in September. Only completed applications will be considered in a selection process.

**Programme Outline:**

**Early Childhood Education**

<b>Semester I</b>	<b>September to December</b>
ECE 151	Child Growth and Development
ECE 154	Theories and Practices of ECE
ECE 165	Programme Development
ECE 170	Observing and Recording Behaviour
ECE 176	Human Relations in Early Childhood Settings
ECE 190	Practicum I
ENGL155	Developmental English (*)

\* *Students MUST receive an exempt or satisfactory standing in ENGL 155 prior to continuing with the second term.*

<b>Semester II</b>	<b>January to April</b>
ECE 153	The Child in Society
ECE 155	Theories and Practices of ECE
ECE 166	Programme Development
ECE 172	Health, Safety and Nutrition in ECE
ECE 174	Interacting with Families
ECE 177	Human Relations in Early Childhood Settings
	<b>January to May</b>
ECE 199	Practicum II

**Programme Outline:**

**Post Basic**

This programme provides graduates of the Basic ECE programme with the post basic training necessary to qualify as Under Three Supervisors.

ECE 251	Infant Growth and Development
ECE 252	Administration of ECE Programmes
ECE 255	Care and Guidance of Infants and Toddlers
ECE 272	Health, Safety, and Nutrition
ECE 274	Interacting with Families
ECE 290	Practicum I
ECE 291	Practicum II

Courses are offered, in the evening, on a part-time basis in response to demand. For more information contact the Admissions and Registration office.

**SOCIAL SERVICES**

The first year certificate programme provides the student with basic knowledge and skills necessary to work as a social service paraprofessional. It combines theory and skill development courses with supervised practical experience.

A second year of study, leading to a diploma, emphasizes skill development and specialization in either Special Education Assistant / Classroom Aide, or Child Care and Family Support.

**Career Opportunities**

Graduates find employment in a variety of social service agencies including: MSSH income assistance offices, the School Districts, residential childcare facilities, community based childcare services, corrections agencies, women's programmes, sexual assault victim treatment services, alcohol treatment or support services and a variety of other social services, agencies and programmes.

**Admission Requirements**

In addition to the requirements outlined below, it is *strongly recommended* that applicants have a background of paid or volunteer experience in a social service setting, and a one day Safety Oriented First Aid Certificate (SOFA, St. John Ambulance).

1. Successful completion of Grade 12, or ABE Advanced Certificate or GED Certificate, or mature student status.
2. All applicants must write the English component of the EMAT. Preference will be given to applicants who are exempt from English 155 or who begin any remedial work prior to April 30.
3. Two letters of reference from an employer, volunteer supervisor, teacher or social service professional, attesting to the applicant's personal suitability for work in the social service field.
4. A work/volunteer experience resumé and a written statement describing career goals, special interests and reasons for seeking entrance to this programme (at least 300 words in length).

Students may be required, dependent upon their practicum placement, to submit a medical certificate with TB testing and up-to-date immunization and/or a police records check.

**Selection Criteria**

1. Letters of Reference
  - a. appropriateness of Reference Provider (5 pts.)
  - b. Reference Provider view of applicants suitability (5 pts.)
2. Previous Academic Experience
  - a. post secondary course work with 'C' or better grade (2 pts. each course)
  - b. includes PREP programme (Pre Residential Employment Programme) 10 pts.
3. Previous Work Experience:
  - a. social services related work volunteer or paid (4 pts.)

## SOCIAL SERVICES PROGRAMMES

- for each 6 mo. period of continuous employment)  
 b. nonsocial services related employment (1 pt for each 6 month period of continuous employment)
4. Personal Statement:
- interest expressed in paraprofessional work
  - congruence between career goals and programme objectives
  - writing ability
  - clearly stated reasons for applying
  - evidence of enthusiasm and positive attitude.

### Application Procedure

Application forms are available at the Office of Admissions and Registration and may be submitted at any time. The programme begins annually in September. Only students who have completed their applications by April 30 will be eligible for selection into the programme.

### Programme Outline: Foundations Certificate

Semester 1	September - December
ENGL 103	Composition and Style
SSF 141	Interpersonal Relationship Skills
SSF 162	Communications for the Social Services
SSF 171	Introduction to Social Service Practice
SSF 181	Community Seminar Social Science Elective*

*\*Choose one of PSYC 101, SOC 101 or CRIM 103. Students who anticipate continuation to a Social Work programme are advised to select Psyc 101 and 102.*

Semester 2	January - April
SOC 206	Social Problems
SSF 142	Helping Skills: Practical Applications
SSF 151	History and Philosophy of Social Welfare Policy
SSF 155	Helping Skills: Theoretical Overview
SSF 182	Community Seminar Social Sciences Elective*
SSF 199	Practicum and Seminar (May - June)

*\*Choose one of PSYC 102, SOC 102 or CRIM 106*

### Programme Outline: Child Care and Family Support Diploma

Semester 3	September - December
SSF 241	Helping Skills: Advanced
SSF 261	Chemical Dependency I
SSF 221	Social Problems: Children and Youth
SSF 225	Introduction to Disabilities
and	
SSF 231	Development and Socialization of Children and Youth (*)

*\* Students may be able to take PSYC 205 or 206 in lieu of SSF 231.*

Semester 4	January - April
SSF 242	Community Development: An Introduction
SSF 262	Chemical Dependency II

SSF 252	Social Welfare Policy: Children and Families
SSF 282	Behaviour Management: Techniques for Working with Children and Youth
SSF 272	Family Systems
SSF 297	Practicum (1 day per week, Jan. - April)(*)
SSF 298	Practicum (5 days per week - May)(*)

*\*Only students enrolled in SSF 273 will register in SSF 297 and SSF 298.*

SSF 299	Practicum and Seminar (May -June) (*) Students may have an opportunity to participate in a Co-op option.
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*(Prerequisite: Successful completion of all required courses with a grade of C or better).*

*\*Only students enrolled in SSF 272 will register in SSF 299.*

### Programme Outline: Special Education Assistant Certificate

#### Semester 1 or 3 September - December

PSYC 101	Introductory Psychology
ENGL 103	Composition and Style
SSF 231	Development and Socialization of Children and Youth
SSF 221	Social Problems: Youth and Children
SSF 225	Introduction to Disabilities

#### Semester 2 or 4 January - April

PSYC 102	Introductory Psychology
SSF 162	Communications for the Social Services
SSF 282	Behaviour Management: Techniques for Working with Children and Youth
SSF 252	Social Welfare Policy II
SSF 273	Classroom Assisting
SSF 297	Practicum (1 day per week, Jan. - April)(*)
SSF 298	Practicum (5 days per week - May)(*)

**DEVELOPMENTAL DISABILITIES CERTIFICATE**

The Developmental Disabilities Certificate is designed for those interested in working with individuals with mental and/or physical disabilities. This certificate is offered in a distance education format only.

Support services are available to assist students, such as answering questions, providing feedback and organizing study groups.

**Career Opportunities**

This programme is designed for people who are currently employed in the social services field, and who are working with mentally or physically handicapped persons. It is also intended for students who are interested in pursuing a career in a variety of social service disciplines.

**Admission Requirements**

Grade 12 or ABE Advanced Certificate, or GED Certificate. Given that the programme is offered by correspondence, students must demonstrate basic English reading comprehension.

**Application Procedure**

Application forms are available from the Office of Admissions and Registration and may be submitted at any time. Applicants must also complete a special SSTP form. The programme may be started in September or January.

**Programme Length**

Students may take up to five years from initial registration to complete all course and practicum requirements. Each course must, however, be completed within one semester. Deadlines for assignments and exams are set for all courses. Students working full-time are strongly advised to take only one or two courses per semester.

**Programme Outline: Developmental Disabilities**

**Required Courses**

- SSTP 130 Physical Care
- SSTP 140 Interpersonal & Organizational Relations
- SSTP 150 Programming & Planning (8 weeks - latter half of semester)
- SSTP 160 Ethics & the Paraprofessional
- SSTP 170 Social Service Provision: History & Systems (8 weeks - first half of semester)
- SSTP 181 Intro to Behaviour Change: Principles and Practices
- SSTP 199 Practicum

**Optional Advanced Specialty Certificate**

- SSTP 182 Introduction to Verbal Behaviour
- SSTP 183 Teaching Language to the Developmentally Delayed

- SSTP 185 Employment Facilitation
- SSTP 186 Advanced Behaviour Change: Principles & Practices

**Course Descriptions**

**ECE 151 Child Growth and Development**  
Human development in the years from conception through the pre-school years with emphasis on the interaction between heredity and environment.

**ECE 153 The Child in Society**  
A study of the many social, cultural and political influences on children and their families. The role of early childhood educator as an advocate for children is emphasized.

**ECE 154 Theories and Practices of ECE and 155**  
A two semester course covering the major theories of Early Childhood Education and the resulting practices such as classroom management, planning for groups and individual children.

**Prerequisite:** ECE 170 is a prerequisite for ECE 155

**ECE 165 Programme Development and 166**  
Two semesters studying the planning of young children's curriculum in fields such as art, music, movement, science, math, social studies, language and literature.

**ECE 170 Observing and Recording Behaviour**  
A study of methods of accurately and objectively observing, recording and interpreting child behaviour using the College Demonstration Day Care and other centres.

**Prerequisite or Corequisite:** ECE 190

**ECE 172 Health, Safety and Nutrition In Early Childhood Education**  
In addition to the health, safety and nutrition of young children. The EBE student is expected to take a certified first aid training course.

**ECE 174 Interacting with Families**  
A study of effective parent-teacher and home-classroom communication and co-operation.  
**Prerequisite:** ECE 170

**ECE 176 Human Relations in and 177 Early Childhood Settings**  
A course to assist the student explore his or her own values, goals and skills and to help improve communication and problem solving skills.

**ECE 190 Practicum I and II and 199**  
Practical experience working with young children under qualified supervision in conjunction with classroom follow up seminars. Students plan and implement learning activities. ECE 190 is divided into Level I and II. Students must maintain a GPA of 2.0 in order to proceed to Level II practicum. ECE 199 is divided into Levels III and IV. Level IV includes six weeks of full-time work experience which can only be undertaken after all other course work has been completed.

## SOCIAL SERVICES PROGRAMMES

### ENGL 103 Composition and Style 3 CR

A study of grammar, composition and style. A vigorous programme of essay writing plus a variety of writing assignments or exercises dealing with specific problems in essay writing. Strongly recommended for students who wish to improve their writing skills. (3,0)

### PSYC 101 Introduction to Psychology I 3 CR

This general survey course includes topics such as a brief history of psychology, elementary experimental design, the nervous system, sensation, perception, learning, memory, language, and thought. (3,0)

### PSYC 102 Introduction to Psychology II 3 CR

A continuation of PSYC 101. Topics will include intelligence and intelligence testing, personality assessment, motivation, emotion, mental health and behavioural disorder, psychotherapy, and social psychology.

**Prerequisite:** PSYC 101

### SOC 206 Social Problems 3 CR

A sociological study of the creation, causes and consequences of contemporary social problems in Canadian society. Topics include: organized crime, juvenile delinquency, sexual harassment, AIDS, mental illness, alcoholism and drug abuse. Factual and moral aspects of these and other social problems will be argued. (3,0)

### SSF 141 Interpersonal Relationship Skills 3CR

This course has two primary objectives. The first is to provide a basic introduction to the theory and dynamics of interpersonal communication. This includes discussions of how self concept, perceptual processes, language and nonverbal behaviour influence communication. Secondly, the course provides opportunities to increase self-awareness in the area of communication and to improve and develop effective interpersonal communication skills. Students study and practice effective listening skills, appropriate expression of feelings, building positive relationships, resolving conflict and problem-solving techniques. Students will participate in a weekly three hour laboratory session in order to facilitate skill acquisition and improvement. (3,3)

### SSF 142 Helping Skills: Practical Applications 3 CR

This course assists students in developing and refining their basic helping skills. Extensive use of video, role play and real experiences provides opportunities for the acquisition and practice of helping skills. This course requires that students participate in a weekly three hour laboratory for the purpose of learning and practicing their helping skills.

**Prerequisite:** SSF 141 (3,3)

### SSF 151 History and Philosophy of Social Welfare Policy 3 CR

This course provides a basic introduction to social welfare policy in Canada, its historical development and its role within the political and economic context of Canadian society. A major emphasis is placed on a review of the values and ideology implicit in various types of social welfare policy. Students will critically analyze the effect of social welfare policies on client populations and upon themselves as

social service workers. Class discussions focus on Northern issues. (3,0)

### SSF 155 Helping Skills: A Theoretical Overview 3 CR

Students become acquainted with the values, assumptions and issues underlying various approaches to helping. An emphasis is placed upon the students developing a better understanding of their own personal helper values, assumptions regarding human behaviour and styles of helping. The various ethical issues relating to being a helper are also examined.

**Corequisite:** SSF 142 (3,0)

### SSF 162 Communications for the Social Services 3 CR

The development of oral presentation skills in the communication of professional material is emphasized. Students will organize and deliver written and oral presentations of both a formal and informal nature. (3,0)

### SSF 164 Education: Systems and Issues 1.5 CR

This course will give the student an understanding of the legislation, policy, and the current direction of public school education in B.C. The student will review the role of the Ministry of Education, the school district and the role of unions in addressing the education needs of children. This course will also cover various aspects of the law and interministerial roles in the schools. Special emphasis is given to the special education assistant/classroom aide's role in the education system. (1.5,0)

### SSF 171 Introduction to Social Service Practice 3 CR

Students are introduced to the practice of social service, its values, knowledge and skill foundations. The principles and contributions of mutual aid, self-help and natural helping networks are examined. The relationship between social service practice and the communities and organizations in which it takes place is a focus of discussion. Other discussion topics include current trends in the field of paraprofessional services, ethics and the basic structure and function of social service agencies. (3,0)

### SSF 181 Community and 182 Seminar I and II 1 CR

Students are introduced to the social service agencies of North Central B.C. The services these agencies provide, the problems they seek to address, their criteria for service, funding structure and relationship to other services will be discussed in a seminar format. (0,1)

### SSF 199 Practicum and Seminar 8 CR

Students must successfully complete an eight week practicum at the end of Semester II in a social service agency. In cooperation with programme staff and the agency supervisor, the student establishes specific learning objectives and works toward these within the context of the agency. The practicum must be successfully completed for the certificate.

Students on practicum meet on a weekly basis to discuss various issues and problems and to share information relating to their supervised work experience. The object of the

seminar is to help students further integrate knowledge and skills acquired during the year with their work in the field.  
**Prerequisites:** SSF 141, 142, 151, 155, 162, 171, 181/182, ENGL 103, SOC 206 with a minimum 'C' grade in each course. (0,4)

**SSF 221 Social Problems: Youth and Children** 3 CR  
 This course will be delivered in a seminar format and will look at the specific problems of children and youth. Issues discussed will include: runaways, AIDS, sexual abuse, drug use, pregnancy, family dysfunction and suicide. (3,0)

**SSF 225 Introduction to the Disabilities** 3 CR  
 This course will examine the various types of emotional and physical disabilities in children and adolescents. An emphasis will be placed on the classification and the etiology of these disabilities as well as the behavioural and physical care issues associated with them. Competence in handling prosthetics and other devices used to assist children with physical disabilities will be emphasized. Also, students will be introduced to alternate forms of communication and technical aids. Students will study the issue of normalization and its application in the community and classroom. (3,0)

**SSF 231 Development and Socialization of Children and Youth** 3 CR  
 Students will be introduced to the normal developmental patterns of childhood and adolescence. Environmental influences on the development of children and youth will also be examined. Students will use the insights gained about their socialization experienced as children to develop and refine their ability to relate effectively with children and youth. (3,0)

**SSF 241 Advanced Helping Skills** 3 CR  
 Students are introduced to the theory and practice of group work in the social services. Topics of study include group dynamics, leadership styles and skills, group development, cultural issues in group work, and ethical issues in group work. This course includes a three hour weekly laboratory experience in which students will learn and practice group work skills.  
**Prerequisites:** SSF 141, 142, 155 (3,3)

**SSF 242 Community Development** 3 CR  
 This course examines the history of community development, distinguishes capacity-based from needs-based motivation, and explores a variety of community development initiatives world-wide. Special emphasis is placed on local/northern community development, and on the capacity of social services paraprofessionals to participate in community development initiatives. (3,0)

**SSF 252 Social Welfare Policy II** 1.5 CR  
 This course will focus on the social policies affecting children and families in Canada. Legislation concerning the protection of children, children in conflict with the law, special needs children, poverty, education and health will be examined in detail.  
**Prerequisite:** SSF 151 (1.5,0)

**SSF 261 Chemical Dependency I: Understanding Substance Abuse** 3 CR  
 This course provides students with a basic introduction to the issue of chemical dependency in Canada. An emphasis is placed on developing an understanding of the theories used to explain the etiology of chemical dependency, the classification of psychoactive drugs, pharmacology of psychoactive drugs, legal issues surrounding the use of drugs and patterns of drug use in Canada. The role that psychoactive drug use plays in the experience of various groups in society, ie. women, Native people, youth and the elderly, will also be examined in detail. (3,0)

**SSF 262 Chemical Dependency II: Responding to Substance Abuse** 3 CR  
 This course introduces students to the intrapersonal and interpersonal dynamics of chemical dependency; its immediate and long-term impacts on the chemically dependent individual and his/her family. Students learn the skills necessary to assess and respond to the needs of chemically dependent persons and/or their family members. Attention is paid to the issues specific to counselling youth, women, Native people, and the elderly. An examination and evaluation of drug abuse prevention strategies will also be undertaken. Professional and ethical issues in working with the chemically dependent will be discussed as well.  
**Prerequisite:** SSF 261 (3,0)

**SSF 272 Family Systems** 4.5 CR  
 Students will study the dynamics of family systems. The stages of family development, communication patterns, rule setting, discipline and problem solving will be presented and discussed. The role of the child/youth care worker in the provision of service to families will be examined in detail. Skills in the facilitation of family functioning and development will be emphasized.  
**Prerequisites:** SSF 141, 142 (3,1.5)

**SSF 273 Classroom Assisting** 4.5 CR  
 Students will learn general educational principles and techniques for classroom assistance with exceptional children in primary, elementary and secondary school settings. Emphasis will be placed on resource development, the development of language skills, co-operative learning and ethical issues in classroom assistance. The principles of integration of exceptional children in the classroom will be presented and discussed.  
**Corequisite:** SSF 297 (3,1.5)

**SSF 282 Behaviour Management: Techniques for Working with Children and Youth** 3 CR  
 This course surveys the various aspects of social service work with children. The three main theoretical models of child helping, the Adlerian model, behaviour modification and general systems theory will be examined in detail. Students learn how to apply these techniques in response to common behavioural problems in a variety of settings including the family, the community and the school. (3,0)



## SOCIAL SERVICES PROGRAMMES

**Social Science Elective** 3 CR  
Students may choose either Psychology 101/102, Sociology 101/102 or Criminology 103/106 depending upon their specific area of interest. For example students wishing to work with the men-tally handicapped or psychiatrically disabled may choose Psychology 101/102, students interested in working with families may be more interested in Sociology 101/102, while those with an interest in the corrections field may select Criminology 103/106. Students are advised to consult with programme staff before making their selection. (3,0)

**SSF 297 Special Education Assistant/  
Classroom Aide Practicum** 4 CR  
Students will work one day per week in a classroom setting under the supervision of a teacher and classroom aide. The practicum is intended to provide students with an introduction to the role and responsibilities of a classroom aide. SSF 273 is a corequisite to this course. Part-time students must complete or be enrolled in all other SSF courses prior to taking the practicum. (0,4)

**SSF 298 Special Education Assistant/  
Classroom Aide Practicum** 4 CR  
As a continuation of SSF 297, students will work five days per week for five weeks in a classroom setting. Students will establish specific learning objectives and, under the supervision of a teacher and classroom aide, apply the skills and knowledge they have learned throughout the year. The practicum must be completed for the certificate.  
**Prerequisite:** SSF 297 (0,4)

**SSF 299 Practicum and Seminar** 8 CR  
Students must successfully complete an eight week practicum in a social service agency or paid Co-op placement. In cooperation with the faculty and the agency supervisor, students establish learning objectives and work toward these within the context of the agency.

Students on practicum meet on a weekly basis to discuss issues and to share information relating to their supervised work experience. The object of the seminar is to help students integrate the know-ledge and skill acquired during the year with their work in the field. The practicum must be successfully completed for the SSF certificate and diploma.  
**Prerequisites:** SSF 221, 225, 231, 241, 242, 252, 261, 262, 272, and 282 with a minimum 'C' grade in each course.

**SSTP 130 Physical Care**  
The goal of this course is to provide the information needed to assist in the maintenance of optimum physical health. A variety of topics are covered. These include: nutrition, body mechanics, medication, common handicapping conditions and safety requirements. In addition, a number of procedures to use when dealing with medical emergencies are reviewed; eg. How do you assist an individual who is having an epileptic seizure?

**SSTP 140 Interpersonal and  
Organizational Relations**  
Critical to successful service provision is the combined and cooperative efforts of the staff comprising a training team.

This course provides information and exercises to develop effective interpersonal skills. These personal skills are regarded as essential for the resolution of conflict and for the development of effective team work. In addition, practical reporting methods and instruments are reviewed. Since the importance of interagency communication has increased, good writing practice is essential and will be graded in this course. An upgrading English course may be helpful as a prerequisite to 140, but is not essential. Many of the communication methods presented in this course are ideals. The practicum will provide the major experience component of communication.

**SSTP 150 Programming and Planning**  
The coordinated effort of many individuals working in several different domains of services is critical to effective and efficient service delivery. This course reviews some of the planning mechanisms currently in use to ensure the coordination of the services system. This course also explores some potential pitfalls to programme implementation and suggests how they might be overcome.  
**Prerequisite:** SSTP 180 or SSTP 181

**SSTP 160 Ethics and the Paraprofessional**  
This course blends the theory of ethical issues with practical guidelines for facilitating ethical conduct. Much of the material is applicable to any social service setting. Issues such as "What is professional conduct?", "What is informed consent?", will be presented. An important aspect of the course is training the practitioner to recognize ethical concerns as they occur during the normal course of each day. Once we become aware of potential violations of ethical conduct, we can act accordingly to safeguard the rights and dignity of our clients.

**SSTP 170 Social Service Provision:  
History and Systems**  
This course is meant to provide a balanced historical perspective of trends in social services provision. The information reviewed is broadly applicable to the social services area. However, in keeping with our current focus on working with mentally handicapped persons, a thorough discussion of normalization, mainstreaming, the least restrictive alternative, and related concepts are included. In addition, an overview of services provided by various B.C. Provincial Government Ministries is presented.

**SSTP 181 Intro to Behaviour Change:  
Principles and Practices**  
This course introduces the student to the principles and procedures of behaviour change. The intent of this course is to provide a thorough exposure to training principles and procedures, while alerting the student to the potential for productive use and possible abuse of the training technique.

**SSTP 182 Introduction to Verbal Behaviour**  
The goal of this course is to provide the theoretical and technical framework necessary for understanding the many practical applications of this training methodology to the development of language.  
**Prerequisite:** SSTP 180 or 181 and 186.

**SSTP 183 Teaching Language to the  
Developmentally Delayed**

The purpose of this course is to translate verbal behaviour theory into concrete and effective procedures for assessment and training. A requirement of this course is that the student will implement a language assessment and participate in a teaching programme with a child ages 18 - 24 months. The course builds on the basic principles in the behaviour change courses to give the student a comprehensive and highly effective set of skills for language training.

**Prerequisites:** SSTP 182, 181 and 186 (or SSTP 180)

**SSTP 185 Employment Facilitation**

This advanced specialty course describes the philosophical and theoretical basis of supported employment and integrates this with practical guidelines and skills necessary to assist individuals with disabilities realize their full potential in the workplace. Students will learn how to work effectively within the various roles of an employment facilitator (marketer, on-site trainer, advocate, etc.) and to facilitate education, government, employer and labor networks). The course will include an overview of services and programmes currently operating in the field.

**Prerequisites:** SSTP 140, 160, 181, 186 (or SSTP 180)

**SSTP 186 Advanced Behaviour Change:  
Principles and Practices**

This course builds on the foundation of introduction to behaviour change by expanding the students' knowledge of how to develop and implement procedures for behaviour change.

**Prerequisites:** SSTP 181

*Note: SSTP 182, 183, 185 and 186 are optional.*

**SSTP 199 Practicum**

A practicum of 12 weeks is required to assist the student in applying to practice.

**Prerequisites:** SSTP 130, 140, 150, 160, 170, and 181 or 180.



## TECHNOLOGY PROGRAMMES

### Divisional Contact:

**Jo Graber**

**Chair, Technologies**

**Telephone: (604) 562-2131, Local 344**

- Commercial Aviation
- Drafting Technician
- Electronics Engineering Technology
- Engineering Graphics and Design Technology
- Forest Resource Technology

Technologists and technicians possess theoretical and practical knowledge to bridge the gap between professionals like engineers, architects, surveyors, foresters, and tradespersons like carpenters, electricians and skidder operators. Applicants considering these programmes must, therefore, have a solid academic background, especially in math and the physical or biological sciences.

Students in Technology Programmes may wish to further their education after graduation in order to receive certification as a professional. University credits for graduates with a Technology Diploma are awarded subject to individual evaluation. Some out-of-province institutions will grant credit for up to two years while in-province articulation agreements are being actively pursued in some areas. In addition, most professional associations have student programmes which give partial credit to Technology graduates and allow those students to complete their studies through continuing education courses while they work and receive valuable practical experience.

All Technology programmes are two years in duration. Students may, however, be able to schedule their courses over a three year period with the assistance of a counsellor and the Division.

### Co-operative Education

The Engineering Graphics and Design Technology, and the Electronics Engineering Technology programmes offer students the opportunity to gain practical experience through the integration of work experience with academic course work. Both programmes include three paid work terms each: two upon completion of the third trimester, and one following the fifth trimester.

Students interested in this option must apply for admission to the Co-operative Education programme. To qualify for work term placement, students must maintain a grade point average of at least 2.0.

**College of New Caledonia  
3330 - 22nd Avenue  
Prince George, B. C.  
V2N 1P8**

**Tel: (604) 562-2131**

## COMMERCIAL AVIATION

This is a new programme scheduled to commence September 1993. The information provided herein is, therefore, subject to change between the time of printing of the calendar and commencement of the programme. Please contact the Counselling and Academic Advising Centre or Pioneer Flight Training Ltd. 963-8625 for current information if you are interested in applying to enter this programme.

This new programme combines 36 credit hours of University Transfer courses with ground school and commercial flight training at Pioneer Flight Training Ltd. located at the Prince George Airport. The University Credit portion of the programme can also be applied to the first year of an Associate of Arts or Science Degree. This allows graduates of the programme to pursue the completion of their Associate Degrees.

The first year of the programme provides training toward a commercial pilot license. In the second year students will have the option of specializing in one of three areas:

Airline Pilot	multi engine endorsement and multi engine instrument rating;
Bush Pilot	multi engine endorsement, float endorsement, tailwheel and ski experience; or
Instructor Pilot	multi engine endorsement and flight instructor rating.

A Commercial Aviation Diploma will be awarded to students who successfully complete 36 University Transfer credits with a minimum 'C' grade in each course and present a letter from Pioneer Flight Training Ltd. indicating satisfactory completion of required Transport Canada written examinations and flight tests for the appropriate license, ratings, and endorsements for one of the above three areas.

### Career Opportunities

Graduates will be prepared for entry level positions as pilots in the Canadian aviation industry. There is a continuing world-wide demand for pilots with intellectual and disciplined skills. This programme prepares pilots who are ready to learn and adapt to increasing levels of technological and societal sophistication.

### Admission Requirements

1. Successful completion of Grade 12 (with English 12) or ABE Advanced Certificate or GED Certificate;
2. Math 11 or Math 045 and Physics 11 or Physics 045 (C+ minimum grade recommended);
3. Math 12 or Math 050, Physics 12, and Computer Science 11 are recommended;
4. Letter of recommendation from Pioneer Flight Training Ltd. stating that the Department of Transport requirements have been satisfied for commercial flight training. This includes:  
Canadian Private Pilot License;  
Transport Canada Category 1 medical certificate;  
Entrance evaluation, including a personal interview; and  
availability of funds to complete the programme.

*Note: An accelerated Private Pilot course will be provided from May through July for those who do not have this license.*

5. Other prerequisites must correspond to the chosen University Credit courses. The suggested programme leads to an Associate of Science or Arts Degree.

### Application Procedure

Application forms are available from the Office of Admissions and Registration and Pioneer Flight Training Ltd. and may be submitted to the CNC Office of Admissions and Registration after September 15 for the following year. Applicants are advised to submit their application early in the academic year. Applications should be completed by April 30 to be eligible for the first selection process. Acceptance into the programme commences mid-May for the intake in September. Only completed applications will be considered in a selection process.

### Tuition fees

The tuition for the academic portion of the programme follows the normal fee structure as outlined elsewhere in this Calendar and is payable to the College of New Caledonia.

Tuition for the flying portion is payable to Pioneer Flight Training Ltd. It includes flight training, ground school, books and supplies, and uniforms. The total tuition fee will vary for each individual according to the past experience and rate of progress. Additional costs to be paid by the student include medical fees and Transport Canada examination. Pioneer Flight Training Ltd. will be able to provide assistance in determining these costs.

Students requiring financial assistance may apply for a Canada Student Loan and should see Pioneer Flight Training Ltd. for a "P.O.P.S." package.

### Programme Outline: Commercial Aviation

Semester I	September to December
ENGL 103	Composition and Style
plus one of	
MATH 100	Precalculus Mathematics
or	
MATH 101	Calculus 1
plus one of	
PHYS 105	General Physics 1
or	
PHYS 102	Introductory Physics 1
Ground school courses:	
TAVI 150	Basic Meteorology
TAVI 151	Theory of Flight/Airframes & Engines
TAVI 152	Air Law
Flight training: 70 hours	
Semester II	January to April
ENGL 104	Introduction to Literature and Composition
plus one of	
MATH 101	Calculus 1
or	
MATH 102	Calculus 2
plus one of	

## TECHNOLOGY PROGRAMMES

PHYS 106 General Physics 2  
or  
PHYS 102 Introductory Physics 2  
Ground school courses:  
TAVI 160 Flight Instrumentation/Navigation & Radio Aids  
TAVI 161 Flight Operations  
TAVI 162 Human Factors  
Flight training: 70 hours leading to Commercial Pilot Licence

### Semester III September to December

common to all options

GEOG 201 Weather and Climate  
SOC 101 Introduction to Sociology 1  
COM 204 Financial Accounting

Ground school courses:

TAVI 250 Advanced Meteorology 1  
TAVI 251 Advanced Navigation 1  
TAVI 252 Survival Training

### Airline Pilot Option

Ground School courses:

TAVI 270 Instrument Flying Procedures 1

Flight Training: 45 hours leading to multi engine endorsement

### Bush Pilot Option

Ground School courses:

TAVI 280 Tailwheel/Ski Flying Operations

Flight Training: 22 hours

### Instructor Pilot Option

Ground School courses:

TAVI 290 Instructional Techniques 1

Flight Training: 30 hours

### Semester IV January to April

common to all options

GEOG 202 The Surface of the Earth  
SOC 102 Introduction to Sociology 2  
COM 222 Management and Organizational Behaviour

Ground school courses:

TAVI 260 Advanced Meteorology 2  
TAVI 261 Advanced Navigation 2  
TAVI 262 Aero Medicine

### Airline Pilot Option

Ground School courses:

TAVI 271 Instrument Flying Procedures 2

Flight Training: 45 hours leading to multi engine instrument rating

### Bush Pilot Option

Ground School courses:

TAVI 281 Float/Mountain Flying Operations

Flight Training: 25 hours leading to multi engine endorsement and float rating

### Instructor Pilot Option

Ground School courses:

TAVI 291 Instructional Techniques 2

Flight Training: 30 hours leading to a multi engine endorsement and flight instructor rating

(For University Credit course descriptions refer to University Credit section of the calendar)

## DRAFTING TECHNICIAN

In this one year programme, students learn to interpret and draft engineering / architectural drawings. An introduction to computer assisted drafting is also presented.

Students who successfully complete the programme with a grade point average of at least 2.0, are eligible to receive a Drafting Technician Certificate by applying to the Office of Admissions and Registration.

Accreditation of this programme by the Applied Science Technologists & Technicians of B. C. is pending.

### Career Opportunities

Graduates have access to many employment opportunities in both industry and government. Following initial entry level employment as junior draftspersons, graduates may progress to more senior positions such as senior draftspersons, quantity estimators, and technical representatives for manufacturers and suppliers of building materials.

### Admission Requirements

1. Successful completion of Grade 12 or ABE Advanced Certificate or GED Certificate;
2. MATH 11 or MATH 045 and Physics 11 or Physics 045 with a recommended standing of 'C' or better in both courses. Effective September '94 a 'C' or better will be required;
3. Applicants must take the English and Math Achievement Test (EMAT) administered by the College prior to the first trimester. Students below the minimum level will be required to take a developmental programme in either one or both subjects.

### Application Procedure

Application forms are available from the Office of Admissions and Registration and may be submitted at any time. Acceptance to the programme begins at the end of April. The programme begins in September.

### Programme Outline:

#### Drafting Technician

Trimester I	September to December
TEGD 150	Technology Graphics
TEDG 151	Materials and Applications I
TMTH 150	Design Technology Mathematics I
TPHY 150	Design Technology Physics
TPRG 150	Introduction to Computers
TSUR 150	Surveying
ENGL 155	Developmental English (if required)(*)
MATH 155	Developmental Mathematics (if required)(*)

\* Students must receive an exempt or satisfactory standing in ENGL 155 and MATH 155.

Trimester II	December to March
FES 161	Foundation of Employment Skills
TEDG 160	Introduction to CAD I
TEDG 161	Materials and Applications II
TEGD 162	Analysis and Design

TEGD 163	Mechanical Technology I
TEGD 164	Electrical Technology
TEGD 165	Structural Mechanics I
<b>Trimester III</b>	<b>March to May</b>
TCOM 160	Technical Communications I
TEGD 170	Introduction to CAD II
TEGD 171	Civil Technology I
TEGD 172	Building Technology I
TEGD 173	Mechanical Technology II
TDRT 170	Drafting Project

## **ENGINEERING GRAPHICS AND DESIGN TECHNOLOGY**

This two year programme provides training in engineering design, with particular emphasis on the design of buildings including ancilliary internal and municipal services and machinery. Students acquire expertise in the application of both manual and computer assisted design and drafting techniques. Using a problem analysis approach, students learn to address and resolve design issues, and present solutions in a format appropriate for design contracts. As a result of this training, students develop the ability to communicate verbally, graphically, and in writing. Three co-operative work terms are optional for students who maintain a GPA of 2.0 or better.

Students who successfully complete the programme with a grade point average of 2.0 or better, are qualified to receive the Engineering Graphics and Design Technology Diploma by applying to the Office of Admissions and Registration.

Accreditation of this programme by the Applied Science Technologists & Technicians of B.C. is pending.

### **Career Opportunities**

Employment opportunities are abundant and varied in both industry and government. Entry level positions typically involve working as drafts-persons for professional engineers and architects. With additional work experience, graduates progress to various occupations such as senior drafts-persons, job captains, specification writers, estimators, contract administrators, and technical representatives for manufacturers and suppliers of building materials.

### **Admission Requirements**

1. Successful completion of Grade 12 or ABE Advanced Certificate or GED Certificate;
2. MATH 11 or MATH 045 and Physics 11 or PHYS 045 with a recommended standing of 'C' or better in both courses. Effective September 1994, a 'C' or better will be required;
3. Applicants must take the English and Math Achievement Test (EMAT) administered by the College prior to the first trimester. Students below the minimum level will be required to take a developmental programme in either one or both subjects.

### **Selection Criteria**

In the event that the Engineering and Graphics Design Technology programme is oversubscribed on April 30th, 1994, the following guidelines will be used for the selection of students, from the list of qualified applicants, to fill 50% of the available seats:

1. the selection committee shall include the Divisional Chair, Programme Coordinator and one additional member of the programme faculty;
2. selection will be based on the following criteria:  
high school academic records, especially in English, science and mathematics courses relevant to the programme;

## TECHNOLOGY PROGRAMMES

post secondary academic records;  
documented field experience in drafting/design.

Mature students who do not meet the academic requirements may be considered based on;

the results of the EMAT examination - a composite mark of at least 11 is required for such consideration;  
the recent completion of a credit course in a relevant area of study, with a better than average grade;  
considerable documented work experience in a relevant area of drafting/design.

### Application Procedure

Application forms are available from the Office of Admissions and Registration and may be submitted at any time. Acceptance to the programme begins at the end of April. The programme starts in September.

### Programme Outline:

#### Engineering Graphics and Design Technology

<b>Trimester I</b>	<b>September to December</b>
TEGD 150	Technology Graphics
TEGD 151	Materials and Applications I
TMTH 150	Design Technology Mathematics I
TPHY 150	Design Technology Physics
TPRG 150	Introduction to Computers
TSUR 150	Surveying
ENGL 155	Developmental English (if required)(*)
MATH 155	Developmental Mathematics (if required)(*)

\* Students must receive an exempt or satisfactory standing in ENGL 155 and MATH 155.

<b>Trimester II</b>	<b>December to March</b>
FES 161	Foundation of Employment Skills
TEGD 160	Introduction to CAD I
TEGD 161	Materials and Applications II
TEGD 162	Analysis and Design
TEGD 163	Mechanical Technology I
TEGD 164	Electrical Technology
TEGD 165	Structural Mechanics I

<b>Trimester III</b>	<b>March to May</b>
TCOM 160	Technical Communications I
TEGD 170	Introduction to CAD II
TEGD 171	Civil Technology I
TEGD 172	Building Technology I
TEGD 173	Mechanical Technology II
TEGD 174	Structural Mechanics II
TMTH 172	Design Technology Mathematics II

**CO-OP 150**      **June to August**

**CO-OP 250**      **September to December**

<b>Trimester IV</b>	<b>December to March</b>
TEGD 250	Plumbing Design
TEGD 251	Civil Technology II
TEGD 252	Building Technology II
TEGD 253	Industrial Process Design
TEGD 254	Structural Wood Design
TEGD 255	Building Regulations

<b>Trimester V</b>	<b>March to May</b>
TEGD 260	Piping Design
TEGD 261	Heating, Ventilation, and Air Conditioning
TEGD 262	Building Technology III
TEGD 264	Structural Steel Design
TEGD 265	Project Report I
TEGD 276	Project Management

**CO-OP 298**      **June to August**

<b>Trimester VI</b>	<b>September to December</b>
TEGD 263	Contracts and Specifications
TCOM 270	Technical Communications II
TEGD 271	Mechanical Technology III
TEGD 272	Building Technology IV
TEGD 273	Quantity Surveying
TEGD 274	Reinforced Concrete Design
TEGD 275	Project Report II

**ELECTRONICS ENGINEERING TECHNOLOGY**

This two year programme provides training in the design, production, installation, and maintenance of electronic equipment. Students acquire a solid theoretical base, complemented with extensive hands-on experience gained through shop and laboratory work.

Students who successfully complete the programme with a grade point average of at least 2.0, are qualified to receive the Electronics Engineering Technology Diploma by applying to the Office of Admissions and Registration.

Electronics Engineering Technology is accredited by the Applied Science Technologists and Technicians of B.C. as a Technologist programme.

**Career Opportunities**

Electronics Engineering Technologists find employment in a wide variety of locations and levels of responsibility. Some of the graduates from the CNC Programme are employed in the following:

- installing and commissioning mobile radios;
- designing cablevision distribution systems;
- evaluating new equipment designs for a provincial research council;
- installing and maintaining microprocessor control systems for natural gas compressor stations;
- designing and maintaining process control schematics for pulp mills;
- installing and maintaining audio and video broadcast equipment at a television station

**Admission Requirements**

1. Successful completion of Grade 12 or ABE Advanced Certificate, or GED Certificate;
2. Math 12 or Math 050 or Math 100; and Physics 11 or Physics 045 with a recommended standing of 'C+' or better in both courses;
3. Applicants must take the English and Math Achievement Test (EMAT) administered by the College prior to the first trimester. Students below the minimum level will be required to take a developmental programme in either one or both subjects.

**Selection Criteria**

1. Students will be accepted into the programme in order of qualification, with a recommended prerequisite of C+ in Math 12 or Math 100 or Math 050.
2. The date of original application.

**Application Procedure**

Application forms are available from the Office of Admissions and Registration and may be submitted at any time. Acceptance to the programme begins at the end of April. The programme begins in September.

**Programme Outline:  
Electronics Engineering Technology**

<b>Trimester I</b>	<b>September to December</b>
TELE 150	Digital Techniques I
TELE 151	Shop Practices I
TELE 152	Circuit Analysis I
TMTH 151	Electronics Mathematics I
TPHY 151	Electronics Physics I
TPRG 151	Introduction to Computers
ENGL 155	Developmental English (if required)(*)
MATH 155	Developmental Mathematics (if required)(*)

\* Students must receive an exempt or satisfactory standing in ENGL 155 and MATH 155.

<b>Trimester II</b>	<b>December to March</b>
FES 161	Foundation of Employment Skills
TELE 160	Circuit Analysis II
TELE 161	Electronics I
TELE 162	Shop Practices II
TMTH 162	Electronics Mathematics II
TPHY 160	Electronics Physics II

<b>Trimester III</b>	<b>March to May</b>
TCOM 160	Technical Communications I
TELE 170	Digital Techniques II
TELE 171	Pulse Circuits
TELE 172	Electronics II
TELE 174	Circuit Analysis III
TMTH 170	Electronics Mathematics III

**CO-OP 150 June to August**

**CO-OP 250 September to December**

<b>Trimester IV</b>	<b>December to March</b>
TELE 250	Communications I
TELE 251	Electronics III
TELE 253	Microprocessors I
TELE 254	Power Systems
TMTH 251	Electronics Mathematics IV
TPRG 260	Technical C Programming

<b>Trimester V</b>	<b>March to May</b>
TELE 260	Communications II
TELE 261	Control Systems I
TELE 262	Industrial Electronics
TELE 263	Systems Project I
TELE 264	Microprocessors II
TELE 252	Transducers and Interfacing

**CO-OP 298 June to August**

<b>Trimester VI</b>	<b>September to December</b>
TCOM 270	Technical Communications II
TELE 270	Control Systems II
TELE 272	Data Communications
TELE 273	Systems Project II
TELE 274	Microprocessors III



# TECHNOLOGY PROGRAMMES

## FOREST RESOURCE TECHNOLOGY

This programme provides students with the skills and knowledge required for a technical career in forestry. The curriculum combines lectures, labs, and field work. The latter includes an eight day forestry orientation course, two five day field schools, and a maximum nine day field tour along the B.C. coast.

Students who successfully complete the programme with a grade point average of at least 2.0, are qualified to receive the Forest Resource Technology Diploma by applying to the Office of Admissions and Registration. Graduates planning to pursue a university level forestry programme should be aware that some courses may be recognized for advanced credit, (consult a counsellor).

This programme is accredited by the Applied Science Technologists & Technicians of B.C. as a technologist programme.

### Career Opportunities

Graduates find jobs in harvesting, reforestation, engineering, protection, research and management of forest resources. Graduates with high academic standing may receive advanced standing of up to one year at the University of British Columbia or the University of Alberta should they choose to continue their study of forestry at a university.

### Admission Requirements

1. Successful completion of Grade 12 or ABE Advanced Certificate or GED Certificate;
2. Math 11 or Math 045; and Biology 11 or Biology 045 with a recommended standing of 'C' or better ;
3. Applicants must take the English and Math Achievement Test (EMAT) administered by the College prior to the first semester. Students below the minimum level will be required to take a developmental programme in either one or both subjects .
4. Students must be prepared for strenuous physical activity in all types of terrain and weather.
5. Keyboard skills are a definite asset.

### Selection Criteria

In the event that the Forest Technology programme is oversubscribed on the review date, the following guidelines for the selection of students to fill half of the available seats will be used.

1. the selection committee shall be comprised of the Divisional Chair at least one member of the programme committee (chosen on the basis of availability of personnel).
2. both experience relevant to forestry and/or academic (education) qualifications will be considered in selecting candidates. Individual candidates who, in the opinion of the selection committee, have a good deal of relevant field experience in forestry and good marks on the EMAT (10 better on the math component), will also receive strong consideration selection.
3. first consideration will be given to candidates with strong academic qualifications in the courses that are pre-

requisite to programme entry.

4. candidates who reside within the college region will be given preference over out of region applicants.
5. mature students who meet the academic requirements for admission and also have a good deal of relevant forestry field experience will receive favourable consideration.

### Application Procedure

Application forms are available from the Office of Admissions and Registration and may be submitted at any time. Acceptance to the programme begins at the end of April. The programme starts the last week in August.

### Programme Outline:

#### Forest Resource

Semester I	August to December
FOR 150	Forestry Orientation
FOR 155	Silvics and Dendrology
FOR 157	Forest Soils and Hydrology
FOR 161	Forest Measurements I
FOR 165	Fire Management I
FOR 171	Aerial Photography and Mapping I
FOR 173	Drafting I
TPRG 188	Introduction to Computers
ENGL 155	Developmental English (if required)(*)
MATH 155	Developmental Mathematics (if required)(*)

\* Students must receive an exempt or satisfactory standing in ENGL 155 and MATH 155 to continue on to the next course for which they are prerequisites.

Semester II	January to April
FOR 154	Forest Products
FOR 156	Forest Ecology
FOR 162	Forest Measurement II
FOR 166	Fire Management II
FOR 172	Aerial Photography and Mapping II
FOR 174	Drafting II
MATH 151	Technical Mathematics
TCOM 181	Technical Communications I

Semester III	September to December
FOR 251	Forest Management I
FOR 253	Silviculture I
FOR 256	Forest Pathology
FOR 261	Forest Measurements III
FOR 267	Supervisory Skills in Forestry
FOR 281	Forest Finance & Administration I
FOR 285	Roads and Transportation I
FOR 287	Logging I
FOR 290	Summer Technical Report
TCOM 281	Technical Communications II

Semester IV	January to April
FOR 252	Forest Management II
FOR 254	Silviculture II
FOR 255	Forest Entomology
FOR 262	Forest Measurements IV
FOR 268	Industrial Relations in Forestry
FOR 282	Forest Finance & Administration II
FOR 286	Roads and Transportation II
FOR 288	Logging II
FOR 299	Coastal Forestry - Field Applications

**Course Descriptions**

The number in parentheses at the end of the descriptions indicates the number of lecture hours and lab or seminar hours per week. Thus (3, 2) indicates 3 hours of lecture and 2 hours of lab or seminar per week.

Courses in this section are typically offered once per year in the semester or trimester as indicated under the specific programme. Students requiring further information are advised to contact the Counselling and Academic Advising Centre.

Students may register only in those courses for which they have specific prerequisites. Students with "P" grades must obtain Instructor and Divisional Chair written permission to continue in sequential courses.

**Technology Courses (in alphabetical order)**

**FES 161 Foundation of Employment Skills 3 CR**  
 Students are instructed in methods of improving their skills in resume writing, interviewing and other job-search related areas. An introduction to interpersonal skills intended to develop the student's ability to work effectively with others is included.  
**Prerequisite:** ENGL 155 (2,2)

**FOR 150 Forestry Orientation 0 CR**  
 This two week course is designed to introduce the student to the basic concepts of forest technology. Emphasis is placed on survival first aid, safe working practices, and field trips relevant to the programme. Woods navigation and survival is stressed during a four day "fly camp". (8 days)

**FOR 154 Forest Products 3 CR**  
 This course introduces the student to the major products produced from raw materials from B.C.'s forests with emphasis on current manufacturing processes. The structure and properties of wood and identification of important Canadian softwood and hardwood species is also emphasized. Tours of local mills and processing plants are an integral part of this course. (2,2)

**FOR 155 Silvics and Dendrology 3 CR**  
 Dendrology involves site recognition of the principle commercial tree species and plant indicators in B.C. Silvics is the study of climatic and site conditions which optimize this growth. (2,2)

**FOR 156 Forest Ecology 4 CR**  
 The course includes the study of forest genetics and the physiology and morphology of selected conifer species. Included in Ecology are basic principles of ecology, moisture, nutrient, and energy regimes, and biogeoclimatic zones.  
**Prerequisites:** FOR 155,157, TPRG 188 (3,2)

**FOR 157 Forest Soils and Hydrology 3 CR**  
 This course is basic to an understanding of forest productivity and the side effects resulting from various forestry practices, with applications in silviculture, watershed management and engineering. Topics covered are landforms and soil formation, physical and chemical properties of soils, description of profiles, the Canadian system of soil classification, and basic principles of hydrology. Field exercise will emphasize sampling description and classification of soils. (2,2)

**FOR 161 Forest Measurements I 4 CR**  
 A field oriented course involving the theory and practice of all aspects of forest measurements. Students will receive a good exposure to timber cruising and basic surveying instruments. (3,3)

**FOR 162 Forest Measurements II 5 CR**  
 A continuation of Forest Measurements I (FOR 161) with emphasis on statistics. The intent is to provide the student with sufficient knowledge and field training to be able to sample forest types to the standards established by the current B.C. Forest Service Cruising manual.  
**Prerequisites:** FOR 161,171, 173, MATH 155 (3,4)

**FOR 165 Fire Management I 3 CR**  
 Fire behaviour as it is affected by weather, topography and fuel types. Weather instruments, fire weather and the Canadian Fire Weather Index System are studied in detail to understand fire management concepts. Slash burning techniques, use of water and fire pumps, domestic and industrial fire fighting methods are also included. Wood safety is stressed throughout this course. (2,2)

**FOR 166 Fire Management II 3 CR**  
 Fire suppression techniques, including use of water, bulldozers, skidders, rotary and fixed wing aircraft, air tankers and chemical retardants. Initial attack and fire crew organization, detection, communications and presuppression planning are covered. Fire suppression methods and concepts are studied through fire simulation exercise.  
**Prerequisite:** FOR 165 (2,2)

**FOR 171 Aerial Photography and Mapping I 3 CR**  
 This is an introductory course in the use of aerial photography and maps in forestry. It provides the student with a working knowledge of map and air photo indexing and referencing systems and a practical background in photo orienteering and photogrammetric measurements. Topics include calculation of map and photo scales, use of contour maps, photo geometry, and stereoscopy. (1,3)

**FOR 172 Aerial Photography and Mapping II 3 CR**  
 This course provides the student with an understanding of photogrammetric practice in the area of land form recognition and interpretation, planimetric map construction from aerial photographs, parallax measurements and special applications in the fields of forest protection, roads, reforestation and soils.  
**Prerequisites:** FOR 157, 171, MATH 155 (1,3)

**FOR 173 Drafting I 2 CR**  
 The Forest Drafting course is designed to complement the Forest Measurements and Aerial Photography and Mapping course taught concurrently in the fall semester. The skills acquired in this course are essential for the student wishing to complete the objectives of other course offerings in the Forest Resource Technology Programme. (1,2)

**FOR 174 Drafting II 2 CR**  
 This course focuses on constructing a harvesting map with roads and cut block boundaries superimposed on the existing topographic map. A planimetric map is developed using computer assisted drafting. A topographic production map is

## TECHNOLOGY PROGRAMMES

produced from survey data collected by students in the field.  
**Prerequisites:** FOR 173, 161, TPRG 188 (0,3)

**FOR 251 Forest Management I 3 CR**  
 The course covers the history and legal basis for management of Crown Forest Land in B.C. Major emphasis is placed on the Forest Act and Regulations. Inventory, Yield Analysis, and A.A.C. are also introduced.  
**Prerequisites:** FOR 156, 166, 162, 172, 174, TCOM 181, MATH 151 (2,2)

**FOR 252 Forest Management II 3 CR**  
 A sequential course to FOR 251 in which emphasis is placed on "integrated" resource management as promulgated by the Ministry of Forests and the Forest Act. Interaction of various resources and resource users are covered. Preparation of a Management/Working Plan for a sub-unit is a major portion of the course.  
**Prerequisites:** FOR 251, 253, 287 (2,3)  
**Prerequisites or Corequisite:** FOR 254, 286, 288

**FOR 253 Silviculture I 4 CR**  
 Silviculture is the application of basic tree biology and forest ecology to the growing, harvesting, and regeneration of trees. The student will apply his basic knowledge of soils and ecology to ecological classification, site preparation and planting operations. Laboratory and field exercises will include planting inspections, silvicultural surveys, pre-harvest silviculture prescriptions and ecosystem mapping.  
**Prerequisites:** FOR 156, 157, 162, 166, 172, 174, TCOM 181, TPRG 188 (3,3)

**FOR 254 Silviculture II 4 CR**  
 Topics include silviculture systems, tree seed collection and processing, direct seeding, nursery practices, tree planting, stand tending, cultural practices (thinning fertilization), tree improvement, and the ecological impact of forestry practices. Emphasis will be on the basic field skills required to cope with the accelerated reforestation and silvicultural programmes in B.C. Also covered are vegetation management and silviculture contracting.  
**Prerequisites:** FOR 253, 251 (4,2)  
**Prerequisites or Corequisite:** FOR 252, 286, 288

**FOR 255 Forest Entomology 3 CR**  
 The student will obtain a practical working knowledge of important insects which affect forest trees. The course concentrates on the habits and economic significance of the most important insect pests in B.C. Stress is placed on detection, evaluation of damage and control.  
**Prerequisites:** FOR 156, 172. (2,2)

**FOR 256 Forest Pathology 3 CR**  
 The student will obtain a practical working knowledge of forest disease organisms and their effect upon forest management. The course will emphasize the recognition of the damage caused by the most important diseases in B.C. In addition to fungi, other pests (or damaging agencies) such as mammals, birds, climate, dwarf mistletoe, nematodes, forest and range weeds, and marine borers will be studied. Damage appraisal techniques and control will be covered where applicable.  
**Prerequisites:** FOR 156, 172 (2,2)

**FOR 261 Forest Measurements III 4 CR**  
 The course will cover the practical application of timber cruising in compliance with the B.C. Forest Service Specifications as set forth in their Cruising Manual. The field data taken in a two-week operation timber cruise is compiled by the manual method to provide an understanding of the compilation procedure and then the data is compiled by the computer to provide a comprehensive cruise report.  
**Prerequisites:** FOR 162, 172, 174, MATH 151 TPRG 188 (0,4)

**FOR 262 Forest Measurement IV 3 CR**  
 This course introduces the student to Weight Scale sampling, M.O.F. Cyclic Billing practices, destructive sampling techniques, M.O.F. Waste Assessment practices and the B.C. Metric Scaling system. Emphasis will be placed on practical log scaling and B. C. Interior log grading rules. This course will prepare the student to take the B. C. Ministry of Forests examination for a license to scale.  
**Prerequisite:** FOR 261 (1,3)

**FOR 267 Supervisory Skills in Forestry 2 CR**  
 The course will emphasize communication methods and skills required for successful supervision and human interaction. Full student participation as individuals and in group discussions is required for this course to be meaningful. (0,2)

**FOR 268 Industrial Relations in Forestry 2 CR**  
 The course will cover the B.C. Labour Code with emphasis on rights of employers and employees. Specific collective agreements, e.g. I.W.A., Forest Industry, B.C.G.E.U. and Provincial Government will be examined. W.C.B. regulations and their impact will be covered.  
**Prerequisite:** FOR 267 (0,2)

**FOR 281 Forest Finance and Administration I 3 CR**  
 This course introduces the student to the fundamentals of business and finance. Topics include business ownership, methods of financing businesses, financial statements and analysis ratios, loans and interest calculations, break even analysis, cost accounting and benefit/cost analysis.  
**Prerequisites:** MATH 151, FOR 154, 162, TPRG 188 (2,2)

**FOR 282 Forest Finance and Administration II 3 CR**  
 A sequential course to FOR 281 in which concepts developed in the previous course are utilized in: cost analysis, stumpage appraisal, cost estimating, budgeting, and application of productivity to unit costs and total costs. Contract law and the development of contract proposals, as well as the associated bidding process will be emphasized.  
**Prerequisite:** FOR 281 (2,2)

**FOR 285 Roads and Transportation I 3 CR**  
 The intent of this course is to provide the student with a basic knowledge of forest engineering practice in the fields of forest road design, field location and surveying of forest roads, soil classification and identification and earthwork calculations. Emphasis is placed on field procedures and micro-computer design applications.  
**Prerequisites:** MATH 151, FOR 162, 172, 174 TPRG 188 (2,3)

**FOR 286 Roads and Transportation II 3 CR**

This course provides the student with an understanding of forest engineering practice in the fields of soil mechanics and compaction, stream flow and culvert design, simple beam timber bridge and log culvert design, construction equipment applications and costing transportation economics, and higher order surveying with transit and level.

**Prerequisites:** FOR 285, TPRG 188 (2,3)

**Prerequisites or Corequisite:** FOR 252, 254, 288

**FOR 287 Logging I 3 CR**

Logging I provides the student with an introduction to the more common logging systems in use in B.C. The course will deal with logging planning, logging phases with emphasis on steep slope logging, log transportation and safety management.

**Prerequisites:** FOR 162, 154, 166, 172, 174 MATH 151, TPRG 188. (2,3)

**FOR 288 Logging II 3 CR**

Logging II is a continuation of the Logging I course with emphasis on interior British Columbia logging systems and methods. A review of logging layout and logging guidelines will be covered as well as principles of logging systems, log transportation, safety management and maintenance of logging equipment. A Management/working plan will be completed in conjunction with other forestry courses.

**Prerequisite:** FOR 287.

**Prerequisites or Corequisites:** FOR 252, 254, 262, 286, (2,3)

**FOR 290 Summer Technical Report 1CR**

Students entering second-year will develop a technical report on their summer experience or employment on a subject authorized by the Forestry Programme Co-ordinator. Specifications for the essay will be discussed with students in TCOM 181 and TCOM 281.

**Prerequisite:** TCOM 181

**Corequisite:** TCOM 281 (1,0)

**FOR 299 Coastal Forestry Field Application 3 CR**

This course is an intensive one week (including weekends) field school in which students participate in a number of field activities and tours in a Coastal B.C. environment. Activities include exercises at the U.B.C. Research Forest as well as other coastal operations and manufacturing facilities.

**Prerequisites:** FOR 251, 253, 256, 261, 281, 285, 287, 267, 290 (9 days)

**MATH 151 Technical Mathematics 3 CR**

A review and expansion of Math 12. Topics include plane geometry, trigonometry, intermediate algebra and practical applications in forest resource technology related areas.

**Prerequisite:** MATH 155 (3,0)

**TAVI 150 Basic Meteorology**

An introduction to basic meteorology theory, weather reports, weather forecasting, flight planning services, and how they are applied to VFR flight. The setting personal VFR weather limits is also covered.

**TAVI 151 Theory of Flight/Airframes & Engines**

Aerodynamics and flight theory as well as the aircraft, its components and the systems which must be managed by pilots using proper operational procedures.

**TAVI 152 Air Law**

The rules, regulations, and procedures governing flight operations are covered. The use of the Air Regulations, Air Navigation Orders, NOTAMS, Information Circulars, and the Aeronautical Information Publication (AIP) are examined.

**TAVI 160 Flight Instruments/Navigation & Radio Aids**

Instrument construction, operation, uses, and limitations are explored. VFR navigation is covered in detail, including definitions, theory, VFR navigation charts, and VFR navigational procedures. The astro compass is introduced. Basic electronic theory as it applies to navigational radio aids and the use of radio navigation charts are also covered.

**TAVI 161 Flight Operations**

This course covers aircraft and systems handling, including multi engine, aircraft performance and icing, mountain flying and winter flying basics, dangerous goods handling, airman-ship, and normal and emergency operating procedures.

**TAVI 162 Human Factors**

Medical facts for pilots, including judgement and decision making, job stress, physical fitness needs for aircrews, multi crew operations, and cockpit resource management are covered.

**TAVI 250 Advanced Meteorology 1**

Meteorological theory and services will be reviewed in detail, as well as the effects of various meteorological conditions on VFR and IFR flight.

**TAVI 251 Advanced Navigation 1**

A review of navigational theory, the earth's shape, navigational charts and map projections, and radio navigation charts. This course also reviews the astro compass for astro navigation.

**TAVI 252 Survival Training**

Focus will be on survival sense for northern flight operations, including basic principles of survival, survival equipment and its use, first aid equipment, basic first aid training and C.P.R. Food rations, searchand rescue, and the use of the emergency locator transmitter (ELT) will also be covered.

**TAVI 260 Advanced Meteorology 2**

This is a continuation of Advanced Meteorology 1. The use of upper atmospheric charts and weather patterns and high altitude flight planning are discussed. Winter flying operations are reviewed.

**TAVI 261 Advanced Navigation 2**

This is a continuation of Advanced Navigation 1. Astro navigation, inertial navigation systems, Loran C, global positioning systems (GPS), Omega navigation, VLF navigation, radar and radar facilities, as well as transponders are covered.

**TAVI 262 Aero Medicine**

A detailed look at medical factors relating to flight and a review of human factors in the flying environment, including physical fitness, decision making, and cockpit resource management.

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### TAVI 270 Instrument Flying Procedures 1

This course reviews multi engine basics and VFR operational procedures. It introduces the IFR system, IFR rules and procedures, and the Canada Air Pilot (CAP). The Canadian Airspace structure will be reviewed, as well as radio navigation charts. IFR departures, enroute and arrival procedures will be introduced, and meteorological considerations discussed.

### TAVI 271 Instrument Flying Procedures 2

This course reviews all IFR operating procedures and the use of equipment needed for IFR flight including instruments, avionics and de-icing systems, IFR departures, enroute navigation procedures, arrival and holding procedures, as well as IFR approaches. Weather considerations with respect to all phases of IFR flight will be focused on. Preparation for the Transport Canada IFR written exam is part of this course.

### TAVI 280 Tailwheel/Ski Flying Operations

This course covers tailwheel flying techniques needed for bush operations from unprepared surfaces: short field, soft field, and crosswind techniques in tailwheel aircraft, and ground manoeuvring on wheels and skis. Weather factors such as whiteout, cold temperatures, pre heating and de-icing, lack of weather information, self reliance, survival, and bush sense will be discussed.

### TAVI 281 Float/Mountain Flying Operations

This course covers float plane seamanship, sailing, taxiing, mooring, docking, take off and landing techniques including glassy water, crosswind, rough water and other factors, as well as special equipment needed for float flying operations. The mountain portion covers mountain weather considerations, flight planning, special equipment, mountain navigation, aircraft performance at high altitudes, and pilot proficiency. Do's and don'ts of mountain flying will be discussed, as well as survival equipment.

### TAVI 290 Instructional Techniques 1

A review of VFR navigation, theory of flight, aircraft instruments, and instrument flying techniques; aircraft engines, airframes, systems and general knowledge. The Transport Canada Flight Training Manual (FTM), the Flight Instructor Guide (FIG), and the Aeronautical Information Publication (AIP) will be covered in detail, as well as air regulations and Air Navigation Orders. The Principles of Learning and Instructional Techniques will be introduced.

### TAVI 291 Instructional Techniques 2

A continuation of Instructional Techniques 1. Development of preparatory ground instruction for pre flight briefings and developing lesson plans for airborne flight and ground school instruction will be covered. A commercial pilot training syllabus will be developed. The FTM, FIG, and AIP will be reviewed in preparation for the Transport Canada written exams and flight test.

### TCOM 160 Technical Communications I 3 CR

This course introduces students to the principles and practices of technical style and format, correspondence, summaries, process descriptions, technical instructions, mechanism descriptions, as well as oral and visual communications.

**Prerequisite:** ENGL 155 (1,2)

### TCOM 181 Technical Communications I 3 CR

This course introduces students to the principles and practices of technical style and format, correspondence, summaries, process descriptions, technical instructions, mechanism descriptions, as well as oral and visual communications. Also included is a component on resume writing.

**Prerequisite:** ENGL 155 (1,2)

### TCOM 270 Technical Communications II 3 CR

This course provides the student with knowledge and techniques in report writing and oral presentation skills as required to document and present the work of TEGD 275 and TELE 273.

**Prerequisite:** TCOM 160, TEGD 265 or TELE 263  
**Corequisite:** TEGD 275 or TELE 273 (1,2)

### TCOM 281 Technical Communications II 3CR

This course provides the student with knowledge and techniques in report writing and oral presentation skills as required to document and present the work of FOR 290.

**Prerequisite:** TCOM 181  
**Corequisite:** FOR 290 (1,2)

### TDRT 170 Drafting Project 6 CR

This course covers the drafting of a larger mechanical or building project appropriate to a one year technician skill level. The student will be provided with sketched details and will prepare working drawings to engineering office standards.

**Corequisites:** TEGD 172, 173 (1,2)

### TEGD 150 Technology Graphics 3 CR

Introduction to engineering graphics: orthographic, isometric and axonometric projections; auxiliary views, plans and sections; technical sketching, lettering and dimensioning; systems approaches to drafting; simple mechanical drawing compositions.

(1,3)

### TEGD 151 Materials and Methods I 3 CR

Introduction to physical properties of materials and material standards. The majority of this course covers the properties and construction methods of soil, concrete and masonry.

(3,2)

### TEGD 160 Introduction to CAD I 3 CR

Computer assisted drafting using AutoCAD. Graphic data input, filing and manipulation. The course covers the basic concepts of CAD systems as well as direct applications with simple projects.

**Prerequisites:** TEGD 150, TPRG 150 (1,3)

### TEGD 161 Materials and Applications II 3CR

Laminated and heavy timber construction as well as steel structural systems for low and high rise construction are studied. Basic concepts of the building envelope are introduced.

**Prerequisite:** TEGD 151 (4,0)

### TEGD 162 Analysis and Design 3 CR

Students study the design process: problem definition, information gathering, analysis, synthesis, sketch proposals, design selection and documentation.

**Prerequisite:** TEGD 150 (2,2)

**TEGD 163 Mechanical Technology I 3 CR**  
 Introduction to mechanical design and drafting. Topics covered include: descriptive geometry; intersection and surface development; tolerances; gear and cam design; threaded fasteners; welding specifications and drawing practices; design of simple mechanical assemblies.  
**Prerequisites:** TEGD 150, TMTH 150, TPHY 150 (2,4)

**TEGD 164 Electrical Technology 3 CR**  
 Students study the application of electricity in buildings and industrial processes. Topics include power and lighting distribution systems and components, including single and three phase systems, as well as the electrical operation of motors and pumps.  
**Prerequisites:** TMTH 150, TPHY 150 (2,1)

**TEGD 165 Structural Mechanics I 3 CR**  
 An introduction to structural mechanics, vectors and force systems as required to design structures.  
**Prerequisites:** TMTH 150, TPHY 150 (5,0)

**TEGD 170 Introduction to CAD II 3 CR**  
 Advanced computer assisted drafting techniques including the use of 3D simulation, customized menu and command creation as well as an introduction to programming using LISP. These techniques will be applied to a more complex project.  
**Prerequisites:** TEGD 160, TMTH 150 (1,3)

**TEGD 171 Civil Technology I 4 CR**  
 This course studies the design of highways including: contour mapping, NTS system of mapping; highway curve calculations - simple, transitional and vertical; grading drawings; soil water properties; rural and highway road layout; culvert design and sizing, storm water calculations, earthwork calculations.  
**Prerequisites:** TEGD 150, 160, TSUR 150, TMTH 150(3,4)

**TEGD 172 Building Technology I 3 CR**  
 An introductory course to architectural design as it relates to wood framed residential construction. Students design a residence and complete a set of working drawings for their design.  
**Prerequisites:** TEGD 150, 161, 162 (1,3)

**TEGD 173 Mechanical Technology II 3 CR**  
 Conveyor system design and drafting: belts and chain drives, couplings and speed reducers, bearings; ISO tolerance specifications; advanced drawing techniques such as doubled auxiliary views, exploded isometric assemblies; parts detailing.  
**Prerequisite:** TEGD 163 (2,2)

**TEGD 174 Structural Mechanics II 3 CR**  
 Introduction to design requirements as defined by the B.C. Building code; principles of Limit States Design; tributary load calculations; design of simple concrete footings and foundation walls as well as wood and steel beams and columns.  
**Prerequisites:** TEGD 165 (4,0)

**TEGD 250 Plumbing Design 2 CR**  
 Water supply and drainage systems for buildings: storm and sanitary systems as well as fire protection systems. Students

will design pressure and gravity systems based on standard calculation and tables as well as the B.C. Plumbing Code.  
**Prerequisites:** TMTH 172, TPHY 150, TCOM 160 (2,1)

**TEGD 251 Civil Technology II 4 CR**  
 The design of municipal subdivisions and associated services: basic urban planning principles, subdivision bylaws; layout, volume calculations, sizing and grading of services.  
**Prerequisites:** TEGD 162, 170, 171 (3,4)

**TEGD 252 Building Technology II 3 CR**  
 An introduction to the design of building elements as they relate to commercial structures using such materials as concrete, masonry and steel. Given proposal drawings, students will prepare a set of working drawings for a low rise commercial or industrial building.  
**Prerequisites:** TEGD 170, 172, 174 (2,2)

**TEGD 253 Industrial Process Design 4 CR**  
 The theory, layout and documentation of industrial process design. Plant layout: site selection, transportation services, manufacturing process layout and schematic drawings. Emphasis on material handling of liquids, gasses, and solids for primary industries, especially sawmills, pulpmills and gas distribution.  
**Prerequisites:** TPHY 150, 170, 173 (3,4)

**TEGD 254 Structural Wood Design 4 CR**  
 The analysis and design of timber structures including beams, columns, and connections. As well, the design of shoring and concrete formwork is covered.  
**Prerequisites:** TEGD 172, 174 (3,3)

**TEGD 255 Building Regulations 2 CR**  
 Federal, provincial and municipal regulations governing the design and construction of the built environment. Zoning regulations and the British Columbia Building Code will be studied.  
**Prerequisites:** TEGD 172, TCOM 160 (2,1)

**TEGD 260 Piping Design 4 CR**  
 Scaled and diagrammatic layouts of piping used in the transmission of gases and liquids in industrial processes: joints, fittings, valves, threads, hangers and supports, transitions.  
**Prerequisites:** TEGD 250, 252 (3,4)

**TEGD 261 Heating, Ventilation and Air Conditioning 3 CR**  
 An introductory course to environmental control in buildings. Topics covered are: heat loss and gain calculations; heating and ventilation systems, air conditioning; related equipment, layouts and associated drawing interpretation.  
**Prerequisite:** TEGD 252 (3,2)

**TEGD 262 Building Technology III 3 CR**  
 Based on given concept drawings for a simple building, students will design appropriate architectural and structural details. Special attention will be paid to the function and assembly of the building envelope including the movement of moisture and heat as well as differential movement.  
**Prerequisite:** TEGD 252 (2,3)

## TECHNOLOGY PROGRAMMES

### TEGD 263 Contracts and Specifications 2 CR

The layout and writing of construction specifications according to Construction Specifications Canada guidelines using Canadian Construction Documents Committee and National Master Specification formats. Topics covered are: specification types, language CCDC 2 front end, products, workmanship, office procedures, information storage and retrieval and the bidding process.

**Prerequisites:** TEGD 252, TCOM 160 (2,1)

### TEGD 264 Structural Steel Design 4 CR

The design of steel structures including calculations and selection of beams, joists, decking, columns and base plates, bracing, as well as the design of welded and bolted connections. Students will detail and analyze shop drawings to BC Building Code and Canadian Institute of Steel Construction standards.

**Prerequisites:** TMTH 172, TEGD 252 (3,3)

### TEGD 265 Projects Report I 2 CR

A major project must be completed on a construction related topic chosen by the student and approved by the Engineering Graphics faculty advisor. The project must be a written report, but may be based on an individual or group prepared design. In this, the first of two courses, the student will derive a thesis statement, create, outline, and complete all material research required and begin designing or writing the report.

**Prerequisites:** TCOM 160, TEGD 251, 252, 253, 254 (0,2)

### TEGD 271 Mechanical Technology III 4 CR

Students will design and prepare mechanical drawings of the heating and ventilating system required for the building designed in the associated Building Assemblies II course. The theory includes the calculations for heating, ventilating and air conditioning loads as well as methods of control.

**Prerequisites:** TEGD 261, 262

**Corequisite:** TEGD 272 (2,3)

### TEGD 272 Building Technology IV 4 CR

The detail design and drafting of a small commercial building from given architectural/engineering concept plans to completed architectural and structural working drawings. Students will work in a team oriented office environment with minimal supervision.

**Prerequisites:** TEGD 262, 264

**Corequisite:** TEGD 274

**Prerequisites or Corequisite:** TEGD 263 (1,4)

### TEGD 273 Quantity Surveying 3 CR

The study of quantity surveying as practised in design offices to the Canadian Institute of Quantity Surveyors standards: general principles of mensuration, taking-off and extending quantities for material and labour; elemental analysis; unit price preparation for such materials as reinforced concrete, paving, masonry, partitions, insulation and roofing; introduction to life-cycle costing.

**Prerequisites:** TEGD 262 (3,2)

### TEGD 274 Reinforced Concrete Design 4 CR

The analysis and design of reinforced concrete including simple beams and slabs, continuous one-way and two-way floor systems, columns, walls and foundations. Details for the concrete-elements of the building studies in TEGD 272 will

be prepared.

**Prerequisites:** TMTH 172, TEGD 252

**Corequisite:** TEGD 272 (3,3)

### TEGD 275 Project Report II 4 CR

Students will complete the project commenced in the Project Report I course and make a formal presentation to an audience to defend their report.

**Prerequisite:** TEGD 265

**Corequisite:** TCOM 270 (0,2)

### TEGD 276 Project Management 2 CR

Project planning, scheduling and control applied to engineering projects: systems theory, organization structures, staffing, management functions, time management, conflicts, planning - CPM & PERT, as well as controlling.

**Prerequisites:** TCOM 160 (2,1)

### TELE 150 Digital Techniques I 3 CR

Introduction to the concept of digital representation. The course covers number systems and codes common to digital systems, logic gates and their functions, Boolean algebra, Karnaugh mapping, design of logical systems, flip-flops, and counter design.

(3,2)

### TELE 151 Shop Practices I 3 CR

A hands-on course covering reading schematic diagrams, measurement of electrical quantities and interpretation of measurements using basic instruments such as meters, multimeters and oscilloscopes, setting up and operating power supplies, signal generators etc., and the theory of simple instruments and bridges.

**Prerequisite or Corequisite:** TELE 152 (1,4)

### TELE 152 Circuit Analysis I 4 CR

An introduction to basic electrical quantities, resistive circuits, and analysis techniques. The course starts with the principles of electrical quantities such as voltage, current, resistance and circuit devices such as EMF and current sources. The course continues with design and direct analysis techniques of simple series/parallel circuits. The course concludes with a detailed quantitative approach to analyzing purely resistive circuits using classical circuit theorems such as superposition, Norton and Thevenin, loop analysis, nodal analysis and tee-pi/pi-tee conversions.

**Prerequisite or Corequisite:** TMTH 151 (4,3)

### TELE 160 Circuit Analysis II 4 CR

This course covers electrical circuits primarily driven by sinusoidal waveforms. Detailed quantitative analysis is performed on circuits containing resistive, capacitive and inductive elements using algebraic and graphical techniques. The course covers, R, C, L, RL, RC and RCL (resonant and non-resonant) circuits as well as RC circuits driven by DC sources.

**Prerequisites:** TELE 151, 152

**Prerequisite or Corequisite:** TMTH 162 (4,3)

### TELE 161 Electronics I 3 CR

An introduction to solid state devices. Starting with an understanding of semi-conductors, the PN junction, diodes and BJT and FET action the course moves into design and analysis of single stage amplifiers and solid state switches. The material concludes with multistage amplifier design and

frequency response of multistage amplifiers.

**Prerequisite:** TPRG 151

**Prerequisites or Corequisites:** TELE 160, TMTH 162 (3,3)

**TELE 162 Shop Practices II 3 CR**

This course covers the design and fabrication of printed circuit boards. Primarily a hands-on course teaching the process of laying out electric circuits on printed copper boards with both manual and CAD techniques. Materials and components, specifications and industry standards, layout and production of artworks, direct and photofabrication techniques and final board assembly are all covered to a level enabling the student to produce prototype boards and small scale production quality boards.

**Prerequisites:** TELE 151, 152 (0,4)

**TELE 170 Digital Techniques II 3 CR**

This course consists of topics designed to prepare the electronics student for a first course in microprocessors. Topics include logic family and subfamily specifications, operation and interfacing, shift register design, multiplexer/demultiplexer design, arithmetic circuits, memory devices and A/D and D/A converters.

**Prerequisite:** TELE 150

**Prerequisites or Corequisites:** TELE 172, 174 (3,3)

**TELE 171 Pulse Circuits 3 CR**

Design and analysis for common non-linear circuits. Topics include a study of the sinusoidal content of non-linear waveforms, clipper and clamper circuits, transistor switches, voltage multipliers, ramp generators, Schmitt triggers, monostable multivibrators, astable multivibrators and the 555 timer.

**Prerequisites or Corequisites:** TELE 172, 174 (3,2)

**TELE 172 Electronics II 3 CR**

A continuation of Electronics I, the material covered includes topics in power amplifier design and analysis, heat sinking and power amplifier implementation, introduction to the operational amplifier as a gain element, design and analysis of basic operational amplifier circuits (summing amplifiers, averaging amplifiers, etc.)

**Prerequisite:** TELE 161

**Prerequisites or Corequisites:** TELE 172, 174 (3,3)

**TELE 174 Circuit Analysis III 3 CR**

A continuation of Circuit Analysis II, this course applies the classical circuit theorems to AC driven circuits containing resistive, capacitive and inductive elements, teaching the operation and analysis of circuits containing inductively coupled elements, magnetic devices, and concludes with DC driven inductive circuits.

**Prerequisites:** TELE 160, 161

**Prerequisite or Corequisite:** TMTH 170 (3,2)

**TELE 250 Communications I 3 CR**

An introductory course in electronic communication. The material begins with a summary of specialized circuits, such as crystal oscillators and filters. The major focus of this course is the theory of amplitude modulation and demodulation, AM circuits, frequency modulation and demodulation and FM circuits.

**Prerequisites or Corequisites:** TELE 251, TMTH 250 (3,2)

**TELE 251 Electronics III 3 CR**

A continuation of Electronics II covering specialized advanced design and analysis topics in oscillators, tuned amplifiers, regulator circuits and switching power supplies, active filters and some non-linear op-amp circuits.

**Prerequisites:** TELE 172, 171 (3,2)

**TELE 252 Transducers and Interfacing 3CR**

This course covers the measurement of non-electrical quantities using electronic transducers, industry standards for transducers, and gathering and processing transducer generated data. The measurement of non-electrical signals and their conditioning for processing by a digital computer are central subjects. The techniques, algorithms, and hardware commonly employed are studied in depth. Applications of temperature measurement, stress and strain, position, velocity, and acceleration are studied.

**Prerequisite:** TPHY 160

**Prerequisite or Corequisite:** TELE 253 (3,3)

**TELE 253 Microprocessors I 3 CR**

A first course in microprocessors using the 8-bit Z-80. A generic micro and instruction set is studied to introduce the student to microprocessor architecture and data handling and movement. Topics related to the Z-80 are architecture, the instruction sets, interrupts, interfacing, and peripheral interfacing chips. General topics include the application of specialized algorithms common to machine language, understanding and using various monitor routines and use of standard bus Z-80 systems.

**Prerequisites:** TELE 170, 172 (3,3)

**TELE 254 Power Systems 3 CR**

An introduction to higher voltage, polyphase systems and electric machinery. The course is an applied extension of the circuit analysis courses with topics that include common connection configurations, transformers, rotating machinery and industrial standards and specification.

**TELE 260 Communications II 4 CR**

A continuation of Communications I, this course explores more advanced topics including propagation, transmission line theory, antennas and broadcast standards.

**Prerequisites:** TELE 250, 251, TMTH 251 (4,3)

**TELE 261 Control Systems I 4 CR**

An introductory course in electronic and mechanical control that takes a very quantitative approach to both analysis and design. The material covered includes feedback, open and closed loop systems, transfer functions, block diagrams, signal flow graphs, modeling of electrical and mechanical elements, time domain analysis, root locus techniques, frequency domain analysis.

**Prerequisites:** TMTH 250, TELE 251, 252

**Prerequisite or Corequisite:** TELE 264 (3,3)

**TELE 262 Industrial Electronics 3 CR**

A course in power related solid state devices such as SCR's, triacs, and power FET's with application of control to industrial machinery and equipment.

**Prerequisites:** TELE 254, 171, 251 (3,3)



## TECHNOLOGY PROGRAMMES

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### **TELE 263 Systems Project I 0 CR**

This is a preparatory course to Systems Project II. The student must produce a project idea to be completed during Trimester 6, define the problem to be solved, plan research, develop and investigate technical material, and anticipate potential problems. Topics will include time management, documentation, budgeting and project management.

**Prerequisite:** TCOM 160

**Prerequisites or Corequisites:** TELE 163, 260, 261,262, 264, TPRG 260 (1,0)

### **TELE 264 Microprocessors II 3 CR**

The study of 16-bit microprocessors and their architecture and instructions. Topics include the 8086/8088 architecture and instructions sets, interrupts, coprocessing concepts, 8089 I/O coprocessors and the 8087 arithmetic coprocessors, including the 80187 and the 80287. Students design and construct a complete 8086 based microcomputer.

**Prerequisites:** TELE 253, TPRG 260 (3,3)

### **TELE 270 Control Systems II 4 CR**

A continuation of Control Systems I, this course concludes analog control with topics in frequency domain design of control systems, digital control techniques with applications of computer control systems.

**Prerequisites:** TELE 261, 264, 262, 260 (4,3)



# TRADES PROGRAMMES

## Divisional Contact:

**Bob Martin**  
**Chair, Trades**  
**Telephone: (604) 561-5804**

### CAAT Cooperative Advanced Apprenticeship Training Diploma Programmes

- Automotive Mechanical Repair
- Heavy Duty Mechanical Repair

### Entry Level Certificate Programmes

- Automotive Mechanical Repair
- Carpentry
- Electrical Work
- Heavy Duty Mechanic
- Millwright
- Machinist

### Certificate Programmes:

- Power Engineering
- Welding

### Provincial Apprenticeship Programmes:

- Automotive Mechanical Repair
- Carpentry
- Electrical Work
- Millwright
- Heavy Duty Mechanics
- Welding

**Marcia Timbres**  
**Chair, College Foundations**  
**Telephone: (604) 561-5823**

### Certificate Programme:

- Cook Training

**College of New Caledonia**  
**3330 - 22nd Avenue**  
**Prince George, B. C.**  
**V2N 1P8**

**Tel: (604) 562-2131**

## Application Procedure

Applications may be submitted at any time, however, students are encouraged to apply early to the programme of their choice. Additional information may be obtained by contacting the Office of Admissions and Registration at the Main Campus (561-5800).

## Attendance Policy

The Trades Division adheres to the attendance policy of the Apprenticeship and Employment Training Branch of the Ministry of Advanced Education, Training and Technology. Three days of unexcused absence (persistent tardiness is equivalent to absence), may result in student suspension or termination from a programme. Given the intense and often short-term nature of Trades training, the policy applies to all trades courses.

## Safety

Workers Compensation Board regulations apply to all Trades programmes. Students are expected to dress and behave appropriately for their shop activities, and must supply their own safety-toed footwear to be worn at all times in the shops. Coveralls and other personal safety equipment is supplied by the College as required.

## CO-OPERATIVE ADVANCED APPRENTICESHIP TRAINING (CAAT) DIPLOMA PROGRAMMES

- Automotive Mechanical Repair
- Heavy Duty Mechanical Repair

These innovative diploma programmes offer many advantages to students interested in careers such as Automotive, Heavy Duty, or Commercial Transport Mechanics, including advanced technical training and credit towards an apprenticeship for those who qualify for work terms. Qualified students acquire extensive practical experience through paid work terms integrated with their technical training. These paid work terms provide students with excellent opportunities to demonstrate their skills to potential future employers. Those who fail to qualify for a work term may complete the programme or course content but will not receive a Co-op Certificate.

The CAAT programme includes Modules II through V which are identical to apprentice technical training, years 1 through 4. Students may exit the programme at any point and enter a traditional apprenticeship.

New intakes occur annually for Automotive students and for Heavy Duty students. The entire programme, including twelve months of paid work terms, can be completed in just over two years.

**Graduates of the entire programme and who become registered apprentices within 12 months can obtain credit for first year apprenticeship and may be able to challenge levels II and III.**

## CAAT AUTOMOTIVE MECHANICAL REPAIR

### Career Opportunities

Graduates of this programme will be qualified for a variety of employment opportunities in the Automotive Repair Field - Automotive Apprentices, Alignment and Brake Specialities, with possible transfer to related jobs in the Automotive industry -- parts personnel, service writers, etc.

### Admission Requirements

1. Successful completion of the entry level training Automotive Mechanical or entry level training Heavy Duty Mechanical Programme with a minimum 70 percent average.
2. Related industry or training experience may be considered in lieu of the Entry Level Training Automotive/Heavy Duty programmes as evaluated by the programme.
3. In order to assist in the selection process in those cases where the programme is over-subscribed, students are required to submit a **handwritten** work experience resume along with a statement as to why they wish to enter the programme.

### Programme Outline:

#### CAAT - Automotive Mechanical Repair

##### Module II

- Measuring Devices
- Brake Systems
- Frames and Suspension Systems
- Automotive Steering Systems
- Wheels, Tires and Hubs
- Introduction to Automotive Electricity
- Welding

##### Co-op Term

##### Module III

- Gasoline Engines
- Diesel Engines
- Exhaust Systems
- Automotive Drivelines
- Drive Axles and Differentials

##### Module IV

- Automotive Electrical Systems
- Automotive Fuel Systems
- Automotive Emissions Control

##### Co-op Term

##### Module V

- Automotive Clutches
- Manual Transmissions
- Transfer Cases
- Automatic Transmissions
- Automotive Air Conditioning

## CAAT HEAVY DUTY MECHANICAL REPAIR

### Career Opportunities

Career opportunities for Heavy Duty Mechanical Repair programme graduates include Heavy Duty Mechanic, Self-employed Heavy Duty Mechanic, Field Mechanic Welder, Shop Foreman, Mechanical Supervisor, Technical Areas (specialization), Diesel Engineering and other engineering fields, Instructing.

### Admission Requirements

1. Successful completion of the entry level training Automotive Mechanical or entry level training Heavy Duty Mechanical Programme with a minimum 70 percent average.
2. Related industry or training experience may be considered in lieu of the entry level training Automotive/Heavy Duty programmes as evaluated by the programme.
3. In order to assist in the selection process in those cases where the programme is over-subscribed, students are required to submit a **handwritten** work experience resume along with a statement as to why they wish to enter the programme.

### Programme Outline:

#### CAAT Heavy Duty Mechanical Repair

##### Module II

- Advanced Braking Systems (Air & Hydraulic)
- Advanced Hydraulic Systems
- Air Conditioning
- Refrigeration
- Air Operated Controls

##### Co-op Term

##### Module III

- Diesel Engines
- Gasoline & Alternate Fuel Systems
- Engine Support Systems
- Carbureted Fuel Systems

##### Co-op Term

##### Module IV

- Diesel Fuel Systems
- Electrical Systems
- Ignition Systems - Electrical & Electronic
- Trailer Wiring
- Electronic Engine Controls

##### Co-op Term

##### Module V

- Drive Axles
- Clutches, Standard Transmissions & Drivelines
- Torque Converters, Powershift & Automatic Transmissions
- Bearings, Seals & Lubricants
- Electronic Transmission Controls

**ENTRY LEVEL TRADES  
(ELT)PROGRAMMES**

- Automotive Mechanical Repair
- Carpentry
- Electrical Work
- Heavy Duty Mechanical Repair
- Millwright
- Machinist

The Entry Level Certificate programmes offer an extensive array of options for those seeking a career in Trades. Varying in length from one to seven months, these programmes prepare students for an apprenticeship or related employment in a trade.

**Admission Requirements (all ELT Trades Programmes)**

All applicants must meet at least one of the following requirements:

1. Successful Completion of Grade 10, or Intermediate ABE Certificate, or GED Certificate, or
2. Successful completion of an Entry Level programme in a related discipline.
3. Related industry experience may be considered in lieu of formal qualifications. As part of the admission process, applicants will be required to write the English and Math Achievement Test (EMAT) for the purpose of providing additional assistance that may contribute to student success.
4. In order to assist in the selection process in those cases where the programme is over-subscribed, students are required to submit a **handwritten** work experience resume along with a statement as to why they wish to enter the programme.

**AUTOMOTIVE MECHANICAL REPAIR**

This five month programme is designed to introduce students to the automotive repair and service industry and provides an overview of automotive systems, tools, and repair procedures as per the course outline.

**Career Opportunities**

This programme prepares students for entry into the CAAT Automotive programme as well as other trade related areas. Successful completion of this programme is a prerequisite to the CAAT Automotive Mechanical Repair programme.

**Selection Criteria**

In those cases where the programme is over-subscribed, the following selection criteria will be used to select one-half of the class in the following order of priority:

1. Work experience as outlined in the written submission.
2. Academic qualifications with preference to those with English 12, Math 12 or equivalent Trades Math, and Physics 11.
3. Level of interest or persistence in entering the programme as demonstrated by continuing applications.
4. Level of commitment to the programme as outlined in the written submission.

**Course Outline**

- Safety and Shop Practices
- Tools and Measuring Devices
- Brakes
- Steering and Suspension
- Basic Electricity
- Batteries, Alternators and Starters
- Ignition Systems
- Fuel Delivery Systems
- Engine Cooling and Lubrication Systems
- Gas and Diesel Engines
- Clutches
- Differentials and Drivelines
- Standard Transmissions
- Transfer Cases
- Automatic Transmission Service
- Employment Skills

## CARPENTRY

This five to seven month programme introduces the student to a variety of skills required in the construction of buildings. Students may start the programme in September or January. They must be in good physical condition, and be prepared to participate in a major class projects in an outdoor environment.

### Career Opportunities

The work of a carpenter included formwork, wall and roof framing, and interior and exterior finishing. Carpenters have opportunities to work in residential, commercial, light industrial or heavy construction fields in the areas of new construction, renovations and maintenance. Carpenters can go on to become foremen, estimators, building inspectors or even job superintendents.

### Course Outline

- Safety and Work Habits
- Tools and Shop Equipment
- Blueprints and Specifications
- Site Layout
- Materials
- Roof Framing
- Concrete Form Work
- Framing
- Basic Stair Construction
- Finishing
- Basic Cabinets

## ELECTRICAL WORK

This twenty (20) week programme is to provide students with skills and theory which may aid them in obtaining an apprenticeship or other related work in the electrical field. Students may start the programme in September or February.

### Career Opportunities

This programme prepares the student for entry into the Electrical Apprenticeship Programme as well as other trade related areas such as counter and warehouse personnel for wholesale and distributing outlets.

Upon obtaining sponsorship in the Apprenticeship Programme, the student may become involved in residential wiring as well as the installation and maintenance of electrical equipment in commercial or industrial settings.

### Selection Criteria

In those cases where the programme is over-subscribed, the following selection criteria will be used to select one-half of the class in the following order of priority:

1. Work experience as outlined in the written submission.
2. Academic qualifications with preference to those with English 12 or ENG 045, Math 12 or Math 050, Physics 11 or PHYS 045.
3. Level of interest or persistence in entering the programme as demonstrated by continuing applications.
4. Level of commitment to the programme as outlined in the written submission.

### Course Outline

- Safety
- Tools and Equipment
- Cables, Fixtures and Fittings
- Canadian Electrical Code
- Conductors, Switches, and Devices
- Distribution Systems
- Electrical Drawings
- Electrical Energy and Power Concepts
- Electromagnetism
- Motors and Motor Controls
- Survival First Aid
- Basic Welding and Cutting

## **HEAVY DUTY MECHANICAL REPAIR**

This five month programme is designed to introduce students to the heavy duty repair and service industry that provides an overview of heavy duty systems, tools, and repair procedures as per the course outline.

### **Career Opportunities**

This programme prepares students for entry into the CAAT Heavy Duty programme as well as other trade related areas. Successful completion of this programme is a prerequisite to the CAAT Heavy Duty Mechanical Repair programme.

### **Selection Criteria**

In those cases where the programme is over-subscribed, the following selection criteria will be used to select one-half of the class in the following order of priority:

1. Work experience as outlined in the written submission.
2. Academic qualifications with preference to those with English 12, Math 12 or equivalent Trades Math, and Physics 11.
3. Level of interest or persistence in entering the programme as demonstrated by continuing applications.
4. Level of commitment to the programme as outlined in the written submission.

### **Course Outline**

- First Aid
- Safety
- Tools, Shop Resources and Equipment
- Rigging
- Welding
- Equipment Operation
- Winches & Wire Ropes
- Basic Braking Systems
- Basic Hydraulic Systems
- Frames, Suspensions, Steering & Running Gear
- Employment Skills

## **MACHINIST**

This is a five month introductory programme for those interested in entering the Machinist Trade. Students may start the programme in September or February.

### **Career Opportunities**

Graduates of this programme will be qualified for employment opportunities in a Machinist Field such as; Machine shops, Pulp Mills, Sawmills and Mines as part of the maintenance crew, making any replacement parts that may be needed.

### **Course Outline**

- Safety
- Shop Drawings
- Tools and Equipment
- Measuring Tools
- Metals and Heat Treatment
- Drilling Machines
- Lathes
- Bandsaws
- Precision Grinders
- Shapers, Planers and Slotters
- Vertical and Horizontal Milling Machines
- Computer Numerical Controls

### MILLWRIGHT

This five month programme is designed to introduce the student to the Millwright Trade. Students may start the programme in September or February.

#### Career Opportunities

Graduates of this programme will be qualified for employment opportunities in a large variety of machinery and heavy stationary mechanical equipment in industrial, commercial and institutional establishments such as; Pulp Mills, Sawmills, Mines and Industrial plants. The activities of a Millwright include the construction of foundations for machinery such as conveyors, pumps, compressors, hydraulic systems and pneumatic equipment.

#### Course Outline

- Safety
- Shop Drawings
- Tools & Equipment
- Hydraulics
- Pneumatics
- Power Drives
- Material Handling
- Metals and Heat Treatment
- Gears, Bearings, Gaskets and Seals
- Machine Installation
- Maintenance Procedures

### CERTIFICATE PROGRAMMES

- Cook Training
- Power Engineering
- Welding

### COOK TRAINING

This ten month pre-employment Cook Training Certificate programme, which begins annually the first week of August, covers all facets of kitchen services and management. Instructional topics include soups and sauces, meat cookery, short order, meat cutting, garde menage (cold kitchen), elementary baking, elements of catering and banquet preparation, storeroom procedures (inventory control), and specialty presentation. Theory and demonstrations are supplemented with extensive practical sessions in the laboratory and kitchen.

#### Career Opportunities

Students who successfully complete the programme are able to find a variety of work placements in hotels, restaurants, catering or camps. The students may also enter into a formal apprenticeship.

#### Admission Requirements

1. Successful completion of Grade 10 or ABE Intermediate Certificate, or GED Certificate or mature student status;
2. A recent Health Certificate must be submitted prior to course commencement;
3. A recent chest X-ray must be submitted prior to course commencement.
4. As a part of the admissions process, applicants will be required to write the English & Math Achievement Test (EMAT) for the purpose of providing additional assistance that may contribute to student success.
5. In addition to the minimum requirements, it is *strongly recommended* that anyone planning to apply to this programme acquire some background by taking the secondary level Foods 11 and 12, and Career Preparation. It is also advisable to have some work experience in a kitchen.

## **POWER ENGINEERING - 4TH CLASS**

This comprehensive ten month programme, running from September to June, provides training for a career in power plant operation and maintenance. Topics covered include maintenance of powerhouse equipment, instrumentation, electricity, engineering sciences and water conditioning. While the practical application of basic principles is emphasized, theory and in-plant training qualifies students to write the Fourth Class Power Engineer's Examination upon completion of the programme.

### **Career Opportunities**

Fourth Class Power Engineers are employed in sawmills, hospitals, refineries, pulp mills, refrigeration plants, breweries and public building.

### **Admission Requirements**

All applicants must meet at least one of the following requirements:

1. Successful completion of Grade 12, or Advanced ABE Certificate, or GED Certificate.
2. Related industry experience may be considered in lieu of formal qualifications. As a part of the admission process, applicants will be required to write the English and Math Achievement Test (EMAT) for the purpose of providing additional assistance that may contribute to student success.
3. In order to assist in the selection process in those cases where the programme is over-subscribed, students are required to submit a **handwritten** work experience resume along with a statement as to why they wish to enter the programme.

### **Selection Criteria**

In those cases where the programme is over-subscribed, the following selection criteria will be used to select one-half of the class in the following order of priority:

1. Work experience as outlined in the written submission.
2. Academic qualifications with preference to those with Algebra 11 or Math 045, Physics 11 or Physics 045, Chemistry 11 or Chemistry 045, or Drafting.
3. Level of interest or persistence in entering the programme as demonstrated by continuing applications.
4. Level of commitment to the programme as outlined in the written submission.

### **Course Outline**

Plant Safety  
 Mathematics  
 Thermodynamics  
 Drafting  
 Boiler Regulations  
 Welding  
 Basic electricity  
 Feedwater Treatment  
 Pumps

Piping and Pipe Fittings  
 Control Instrumentation  
 Powerhouse Maintenance  
 Boiler Fitting, Operation & Maintenance,  
 Accessories  
 Heating Boilers & Systems  
 Internal Combustion Engines  
 Refrigeration and Air Compression  
 Lubrication  
 Boiler Parts and Construction



## WELDING

### Beginning Welding (Registered "C" Level)

The curriculum for this programme is organized in a modular format to accommodate the varying rates at which students learn. Upon completion of the programme, a student will have gained sufficient practical experience and theoretical knowledge to successfully complete any of the various skill assessments administered by employers.

Programme length may vary from five to seven months.  
**Intake is continuous given the programme's modular structure.**

### Career Opportunities

Graduates of this programme will be qualified for a variety of employment opportunities in the construction and metal working industries. Production welder, maintenance welder, welder fabricator, or welder fitter are examples of the many possible employment opportunities.

### Admission Requirements

All applicants must meet at least one of the following requirements:

1. Successful completion of Grade 10 or Intermediate ABE Certificate, or GED Certificate.
2. Related industry experience may be considered in lieu of formal qualifications. As a part of the admission process, applicants will be required to write the English and Math Achievement Test (EMAT) for the purpose of providing additional assistance that may contribute to student success.

### Course Outline

P-1	Introduction and Programme Orientation
P-2	Gas Cutting
P-3	Gas and Braze Welding
P-4	Shielded Metal Arc Welding
P-5	Air Carbon Arc Cutting
P-6	Gas Metal Arc Welding; Flux Core Arc Welding
RK-1	Material Handling and Rigging
RK-2	Blueprint Reading I
RK-3	Introduction to Metallurgy I

## ADVANCED WELDING

(Upgrading, Registered "B" and "A" Levels and Testing)

### Admission Requirements

1. Registered "B" and "A" Levels require the candidate to have successfully completed the Registered "C" Level.
2. Testers require written proof of industrial welding experience on company letterhead or a signed affidavit from a Notary Public as follows
  - \*C.W.B. - 18 mos. F/T work experience
  - \*"C" Challenge - 24 mos. F/T work experience
  - \*"B" Challenge - 36 mos. F/T work experience
  - \*"A" Challenge - 48 mos. F/T work experience

Applicants should contact the CNC Welding Department( for assessment, space availability, and testing requirements.

### Course Outline:

#### Registered "B" Level

Registered "B" Level contains training in the following practical and related knowledge modules:

P-7	Shielded Arc Welding II (S.M.A.W.II)
P-8	Gas Metal Arc Welding II (G.M.A.W.II)
P-9	Flux Core Arc Welding II (F.C.A.W.II)
P-10	Gas Tungsten Arc Welding I (G.T.A.W.I)
RK-4	Inspection Procedures
RK-5	Welding Standard and Quality Control
RK-6	Blueprint Reading II
RK-7	Metallurgy II

### Course Outline:

#### Registered "A" Level

Registered "A" Level contains training in the following practical and related knowledge modules:

P-11	Shielded Metal Arc Welding III (S.M.A.W.III)
P-12	Gas Tungsten Arc Welding II (G.T.A.W.II)
RK-8	Metallurgy III
RK-9	Blueprint Reading III

### Testing

Company, industry, government and other tests are administered at CNC. The instructor will inform interested parties as to the paperwork required by the various companies and the Boiler Inspection Branch. The instructor will supervise the practical test as well as arrange for inspection by the government Boiler Inspector.

## **PROVINCIAL APPRENTICESHIP PROGRAMMES**

An apprenticeship is a formal written agreement between an employer, an employee and the Province of B.C., during which an apprentice attends training classes at one of several B.C. colleges approximately once a year. The Apprenticeship and Employment Training Branch schedules the classes, arranges for apprentices to attend, and monitors their progress. Graduates qualify to write the Interprovincial Standards Examination for their chosen trade, following employment as an apprentice for the period of time specified in the Ministry guidelines.

CNC currently offers apprenticeship classes in the following trades:

- Automotive Mechanical Repair
- Carpentry
- Electrical Work
- Millwright
- Heavy Duty Mechanics
- Welding

Each programme follows the provincial course outline approved by the Ministry of Advanced Education, Training and Technology. Persons interested in these or any other apprenticeable trades should contact:

**The Apprenticeship and Employment Training Counselor**  
**Ministry of Advanced Education, Training and Technology**  
**1577 - 7th Avenue**  
**Prince George, B.C. V2L 3P5**  
**Tel: 565-6020**

or

**The Apprenticeship and Employment Training Division**  
**Ministry of Advanced Education, Training & Technology**  
**Room 310 4946 Canada Way**  
**Burnaby, B.C. V5G 4J6**  
**Tel: 660-7227**



# UNIVERSITY CREDIT PROGRAMMES

## Divisional Contacts:

**Gordon Ingalls**  
Chair, University Credit Arts  
Telephone: (604) 561-5815

**Alistair McVey**  
Chair, University Credit Sciences  
Telephone: (604) 561-5830

CNC offers a broad spectrum of university credit Arts, Social Science, Science, Applied Science, Commerce, and Physical Education courses. Eighteen packaged programmes, comprised of first and second year courses, provide the basis for further study in as many as seventy career paths. The College also offers a two-year criminology diploma and two associate degrees:

- Associate of Arts Diploma - Criminology
- Associate of Arts Degree
- Associate of Science Degree

Other programmes, enhancing the options open to applicants, include *Science One*, an interdisciplinary science and engineering programme specially designed for students, with a solid academic record, planning to pursue further study in Science, Applied Science, or science related careers. The *Fine Arts Foundation Year*, offered in co-operation with the Emily Carr College of Art and Design (ECCAD) provides the basis for a diploma in Fine Arts, which is obtained through further study at the ECCAD in Vancouver, and a degree may be obtained through the Open University. Please contact CNC for further details. The *NEW CAL TEC* (New Caledonia Teacher Education Consortium) programme, established in conjunction with Simon Fraser University (SFU), allows students to complete a Teaching Certificate or Bachelors Degree in Prince George. This programme is offered at Prince George and Nechako Campuses. Bachelor and Master level *Business Administration* degrees are offered through City University, operating a district office at CNC.

Opportunities for more advanced studies in various disciplines are continually being expanded. In conjunction with SFU, an increasing number of third year Criminology courses are being offered. The development of courses leading to the Bachelor of Nursing Degree is also in progress.

The Regional Centres offer University Credit courses, and provide information on Open Learning Agency and City University programmes.

All university credit courses are open to qualified part-time students, subject to availability of class space. In addition, a number of courses are offered specifically in response to requests from part-time students.

## Admission Requirements

It is *strongly recommended* that secondary school students consult with their counsellors to ensure that they select the secondary school courses most appropriate for their chosen career paths. Admission requirements are as follows:

1. Successful completion of Grade 12 (with English) or ABE Advanced Certificate or GED Certificate or completion of Grade 11, with an outstanding academic record, in the year of application;

*Note: The GED certificate meets the general admission*

**College of New Caledonia**  
3330 - 22nd Avenue  
Prince George, B. C.  
V2N 1P8

**Tel: (604) 562-2131**

*requirements but does not meet specific programme or course prerequisites.*

2. Compliance with course prerequisites as specified;
3. Students applying for admission to MATH 101, CSC 109, PHYS 101 or CHEM 111 who have obtained less than a "B" grade in MATH 12 must write a college administered test in mathematics. Students below a certain level in that test should enroll in MATH 100, CSC 100, PHYS 105 or CHEM 113.

### **Application Procedure**

Applications forms are available from the Office of Admissions and may be submitted any time after September 15 for the following year. Acceptances for first year students applying for packaged programmes commence at the end of April. Part-time and returning students are individually advised of appropriate registration procedures by the Office of Admissions and Registration.

### **First Year Students**

To select a programme, first-year students are advised to consult the Index of Career Paths which lists all options and corresponding programme packages. Once an option has been selected, the programme package (or packages) specified should then be referred to for more detailed information regarding courses and prerequisites. **Applicants should consult with a College counsellor when selecting their programmes.**

While it is preferable to select one of the programme packages offered, students may also design their own programmes. Those who do so will not, however, be allowed to pre register, and may encounter other difficulties, such as timetable conflicts, and inappropriate course selections causing limitations in transferability.

### **Second Year Students**

Second year students are strongly advised to consult with a counsellor when selecting their courses. While some may have considerable flexibility in their selections, others may have to adhere to specific requirements prescribed by their programmes.

# Career Path Index

## ARTS AND SOCIAL SCIENCE

Anthropology	1D
Economics	1A, 1B
English	1A, 1B, 1C,
Geography	1D
History	1C, 1D, 1F
Industrial Relations	1A, 1B
Mathematics	1A, 1B
Philosophy	1F
Psychology	1A, 1B, 1C, 1D, 1F
Sociology	1F

## COMMERCE AND BUSINESS ADMINISTRATION

1A or 1B for all areas

Accounting and Management Information Systems  
 Commerce and Economics  
 Commerce and Law (for combined degrees)  
 Computer Science  
 Finance  
 Industrial Administration  
 Industrial Relations Management  
 Marketing  
 Transportation and Utilities  
 Urban Land Economics

## PROGRAMMES FOR ADMISSION TO PROFESSIONAL SCHOOLS

Architecture	Any package
Chiropractic Medicine	2A
Criminology	1E
Dental Hygiene	2E
Dentistry	2A, 2C, 2D, 2E
Education	
1. Elementary	1C or 1D
2. Secondary	Any package except 1E
Engineering	2H
Forest Science	2F
Home Economics	2A, 2B
Law	Any package
Medical Laboratory Technology	2B
Medicine	2A, 2C, 2D, 2E
Pharmaceutical Science	2A
Physical Education and Recreation	1G
Rehabilitation Medicine	2E
Social Work	1F

## SCIENCE

Astronomy	2A, 2B, 2C, 2D
Biochemistry	2A
Biology	
1. Botany	2A
2. Ecology	2A
3. Functional Biology	2A
4. Marine Biology	2A
Biological Sciences	2A
Biophysics	2A
Chemical Physics	2A, 2D
Chemistry	2A, 2C, 2D, 2E
Computer Science	2D
Geography	2D
Mathematics	2A, 2C,
Microbiology	2A
Oceanography	2A
Pharmacology	2A
Physics	2A
Physiology	2A
Psychology	2A

## AGRICULTURAL SCIENCE

2G for all areas

Agricultural Economics  
 Agricultural Mechanics  
 Animal Science  
 Food Science  
 Plant Science  
 Poultry Science  
 Soil Science

## APPLIED SCIENCE

2H for all areas

Bio-Resource Engineering (5 year programme)  
 Chemical Engineering (2H for the 4 year programme)  
 Civil Engineering  
 Design and Computer Aided Engineering  
 Electrical Engineering  
 Engineering Manufacturing and Business Management  
 Engineering Physics  
 Mechanical Engineering  
 Metallurgical Engineering  
 Mining and Mineral Process Engineering  
 Ocean Engineering

Package	Semester I	Semester II	Notes
<b>1A</b>	ECON 201 ENGL 101 or 103 MATH 101 CSC 109 PSYC 101	ECON 202 ENGL 102, 103 or 104 MATH 102 CSC 110 PSYC 102	<ol style="list-style-type: none"> <li>Students must take Programme 1A for a career path to a Bachelor of Commerce and Business Administration at UBC. Students may take a university transfer elective in the second semester instead of CSC 109/110.</li> <li>It is strongly recommended that all students considering the Business programme at SFU take COM 204 (1st semester), CSC 109 (2nd semester, note Math 101 is a corequisite), and Economics 201/202 in lieu of Economics 101/102 during their first year. ENGL 103 is not acceptable as a Group A requirement for SFU's Business Degree.</li> <li>Prerequisites: MATH 12 or MATH 100 or MATH 050.</li> <li>Students transferring to the Faculty of Commerce and Business Administration at UBC must take English 103 along with one other English.</li> </ol>
<b>1B</b>	ENGL 101 or 103 ECON 101 MATH 100 CSC 100 or 109 PSYC 101	ENGL 102 or 104 ECON 102 MATH 101 CSC 109 or 110 PSYC 102	<ol style="list-style-type: none"> <li>Students may substitute MATH 100/101 for FREN 101/102 for a General Arts Degree at UBC.</li> <li>Prerequisites: MATH 11 or MATH 045.</li> </ol> <p><i>Note: Some courses may be changed to other electives. Students will have an opportunity to make changes prior to the start of classes. Students should contact a counsellor for assistance and clarification. For students NOT transferring to SFU, if ENGL 104 is selected, it must be combined with ENGL 103 for transfer credit.</i></p>
<b>1C</b>	GEOG 101 or 103 BIO 103 or GEOG 201 ENGL 101 or 102 HIST 103 PSYC 101	GEOG 103 or 101 BIO 104 or GEOG 202 ENGL 102 or 104 HIST 104 PSYC 102	<ol style="list-style-type: none"> <li>This programme has been designed specifically to meet the requirements for students wishing to pursue an SFU Elementary Teaching Certificate and/or subsequent full degree completion.</li> </ol>
<b>1D</b>	ANTH 102 BIO 103 or GEOG 101 ENGL 101 or 102 HIST 103 PSYC 101	ANTH 101 BIO 104 or GEOG 103 ENGL 102 or 104 HIST 104 PSYC 102	<ol style="list-style-type: none"> <li>Students may substitute MATH 103/104 for any one of the above courses, except English.</li> <li>Students with Biology 11 and/or Biology 12 must substitute Geography for BIO 103/104 if they wish to transfer to the UVIC Elementary Education programme. Students must see a counsellor for clarification.</li> </ol>
<b>1E</b>	<p>Year 1</p> ENGL 103 CRIM 101 CRIM 103 SOC 101 PSYC 101	PSCI 131 CRIM 102 CRIM 106 SOC 102 PSYC 102	<ol style="list-style-type: none"> <li>Students must take Programme 1E for a career path to a Bachelor's Degree in Criminology at SFU.</li> <li>Prerequisite: Completion of Grade 12 (with English) or ABE Advanced Certificate or GED.</li> <li>See Criminology programme requirements on page 80.</li> <li>*Criminology 135 &amp; 230 presently being articulated.</li> </ol> <p><i>Note: A statistics course is required in the second year (PSYC 201) and must be successfully completed in order to enroll in CRIM 120.</i></p>
	<p>Year 2</p> CRIM 135* CRIM 201 OR 241 PSYC 201 GROUP B ELECTIVE GROUP C ELECTIVE	CRIM 120 CRIM 230* PHIL 101 GROUP C ELECTIVE GROUP C ELECTIVE	
<b>1F</b>	CRIM 101 ENGL 101 or 103 HIST 103 PSYC 101 SOC 101	CRIM 106 or 102 ENGL 102, 103 or 104 HIST 104 PSYC 102 SOC 102	<ol style="list-style-type: none"> <li>Students must take Programme 1F to pursue a Bachelor's Degree in Social Work at UBC or at UVIC.</li> </ol> <p><i>Note: A statistics course is strongly recommended during the first two years - MATH 104 or PSYC 201.</i></p>

# UNIVERSITY CREDIT PROGRAMMES

Package	Semester I	Semester II	Notes																								
1G	<p><b>Physical Education</b> Students should select one of 1G-A, 1G-B, or 1G-V. The selection should be based upon career needs and the transfer university. Prerequisites: MATH 11. In addition, the following courses are desirable: MATH 12, Biology 11 and 12, Chemistry 11, Physics 11 and Physical Education 11 and 12.</p>		<p>Performance courses include PAC 101 through PAC 111. Each performance course is six weeks in duration.</p> <p><i>Note: Students should refer to the appropriate university calendar as a guide to selecting electives and consult with a counsellor.</i></p>																								
1G-A	<p style="text-align: center;"><b>University of Alberta Year 1</b></p> <table border="0"> <tr> <td>PE 120</td> <td>PE 122</td> </tr> <tr> <td>PE 123</td> <td>PE 124</td> </tr> <tr> <td>ENGL 101 or 103</td> <td>PE 125</td> </tr> <tr> <td>2 of PSYC 101, BIO 102, or GEOG 101 or 103</td> <td>ENGL 101, 102, 103, or 104</td> </tr> <tr> <td>Physical Activity Course</td> <td>PSYC 102, BIO 101, or GEOG 101 or 103</td> </tr> <tr> <td>Physical Activity Course</td> <td>Physical Activity Course</td> </tr> <tr> <td>Physical Activity Course</td> <td>Physical Activity Course</td> </tr> </table> <p style="text-align: center;"><b>Year 2</b></p> <table border="0"> <tr> <td>PE 121</td> <td>PE 220</td> </tr> <tr> <td>PE 221</td> <td>PE 222</td> </tr> <tr> <td>PE 223</td> <td>PE 224</td> </tr> <tr> <td>Approved Option</td> <td>Approved Option*</td> </tr> <tr> <td>Physical Activity Course</td> <td>Physical Activity Course</td> </tr> </table>		PE 120	PE 122	PE 123	PE 124	ENGL 101 or 103	PE 125	2 of PSYC 101, BIO 102, or GEOG 101 or 103	ENGL 101, 102, 103, or 104	Physical Activity Course	PSYC 102, BIO 101, or GEOG 101 or 103	Physical Activity Course	Physical Activity Course	Physical Activity Course	Physical Activity Course	PE 121	PE 220	PE 221	PE 222	PE 223	PE 224	Approved Option	Approved Option*	Physical Activity Course	Physical Activity Course	<p>* See University of Alberta Calendar and consult with a faculty member.</p>
PE 120	PE 122																										
PE 123	PE 124																										
ENGL 101 or 103	PE 125																										
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PE 121	PE 220																										
PE 221	PE 222																										
PE 223	PE 224																										
Approved Option	Approved Option*																										
Physical Activity Course	Physical Activity Course																										
1G-B	<p style="text-align: center;"><b>University of British Columbia Under Review</b></p>		<p>All students entering the physical education programme for transfer to UBC must consult a physical education faculty member for course selection prior to registration.</p>																								
1G-V	<p style="text-align: center;"><b>University of Victoria Arts Degree with Major in Human Performance</b></p> <table border="0"> <tr> <td>PE 121</td> <td>PE 122</td> </tr> <tr> <td>PE 123</td> <td>PE 124</td> </tr> <tr> <td>PE 223</td> <td>PE 224</td> </tr> <tr> <td>ENGL 101 or 103</td> <td>ENGL 101, 102, 103, or 104</td> </tr> <tr> <td>PSYC 101</td> <td>PSYC 102</td> </tr> <tr> <td>SOC 101</td> <td>Physical Activity Course</td> </tr> <tr> <td>Physical Activity Course</td> <td></td> </tr> </table>		PE 121	PE 122	PE 123	PE 124	PE 223	PE 224	ENGL 101 or 103	ENGL 101, 102, 103, or 104	PSYC 101	PSYC 102	SOC 101	Physical Activity Course	Physical Activity Course		<p>Students wishing to pursue a Science Degree with a major in Human Performance should consult the UVIC calendar, a counsellor, and/or a Physical Education faculty member.</p>										
PE 121	PE 122																										
PE 123	PE 124																										
PE 223	PE 224																										
ENGL 101 or 103	ENGL 101, 102, 103, or 104																										
PSYC 101	PSYC 102																										
SOC 101	Physical Activity Course																										
Physical Activity Course																											
2A	<table border="0"> <tr> <td>BIO 102</td> <td>BIO 101</td> </tr> <tr> <td>CHEM 111</td> <td>CHEM 112</td> </tr> <tr> <td>ENGL 101 or 103</td> <td>ENGL 102 or 104</td> </tr> <tr> <td>MATH 101</td> <td>MATH 102</td> </tr> <tr> <td>PHYS 101</td> <td>PHYS 102</td> </tr> </table>		BIO 102	BIO 101	CHEM 111	CHEM 112	ENGL 101 or 103	ENGL 102 or 104	MATH 101	MATH 102	PHYS 101	PHYS 102	<ol style="list-style-type: none"> <li>BIO 101/102 is required in the first year for a Major in the Life Sciences (Biochemistry, Biology, Botany, Microbiology, Pharmacology, Physiology, and Zoology). Other science majors may select an Arts elective.</li> <li>Home Economics majors must replace PHYS 101/102 with ECON 201/202, and may replace MATH 101/102 with MATH 103/104 or a Social Science if MATH 12 was taken.</li> <li>Prerequisites: MATH 12 or MATH 100, or MATH 050, Biology 11 or BIO 045, Chemistry 12 or CHEM 050, and Physics 12.</li> <li>See also Science One.</li> </ol>														
BIO 102	BIO 101																										
CHEM 111	CHEM 112																										
ENGL 101 or 103	ENGL 102 or 104																										
MATH 101	MATH 102																										
PHYS 101	PHYS 102																										

Package	Semester I	Semester II	Notes
2B	BIO 102 CHEM 113 ENGL 101 or 103 MATH 100 PHYS 105	BIO 101 CHEM 114 ENGL 102 or 104 MATH 101 PHYS 106	<ol style="list-style-type: none"> <li>1. Students majoring in a Physical Science may replace BIO 101/102 with an Arts elective.</li> <li>2. Home Economics majors must replace PHYS 105/106 with ECON 201/202, and may replace MATH 101/102 with MATH 103/104 or a Social Science if MATH 12 was taken.</li> <li>3. Prerequisites: MATH 11 or MATH 045, Chemistry 11 or CHEM 045, Biology 11 or BIO 045, Physics 11 or PHYS 045.</li> </ol>
2C	CHEM 113 ENGL 101 or 103 MATH 101 CSC 109 PHYS 105	CHEM 114 ENGL 102 or 104 MATH 102 CSC 110 PHYS 106	<ol style="list-style-type: none"> <li>1. Prerequisites: MATH 12 or MATH 100 or MATH 050, Chemistry 11 or CHEM 045, Physics 11 or PHYS 045.</li> </ol>
2D	CHEM 111 ENGL 101 or 103 MATH 101 CSC 109 PHYS 101	CHEM 112 ENGL 102 or 104 MATH 102 CSC 110 PHYS 102	<ol style="list-style-type: none"> <li>1. Students majoring in Physical Geography must replace CSC 109/110 with GEOG 201/202.</li> <li>2. Prerequisites: MATH 12 or MATH 100 or MATH 050, Chemistry 12 or CHEM 050 and Physics 12.</li> <li>3. See also Science One.</li> </ol>
2E	BIO 102 CHEM 111 or 113 ENGL 101 or 103 MATH 100 PSYC 101	BIO 101 CHEM 112 or 114 ENGL 102 or 104 MATH 101 PSYC 102	<ol style="list-style-type: none"> <li>1. Dental Hygiene students can change Math 100/101 to another university credit elective.</li> <li>2. Dental Hygiene students can select either BIO 101/102 or BIO 103/104.</li> <li>3. Prerequisites: MATH 11 or MATH 045, Biology 11 or BIO 045, Chemistry 11 or CHEM 045 (for CHEM 113), Chemistry 12 or CHEM 050 (for CHEM 111).</li> </ol>
2F	ENGL 101 or 103 FORS 111 MATH 101 MATH 104 BIO 102 or CHEM 113 or PHYS 105	ENGL 102 or 104 FORS 112 MATH 102 MATH 105 BIO 101 or CHEM 114 or PHYS 106	<ol style="list-style-type: none"> <li>1. Students must select the science which was NOT taken at the grade 12 level.</li> <li>2. Prerequisites: MATH 12 or MATH 100 or MATH 050, Biology 11 or BIO 045, Chemistry 11 or CHEM 045, Physics 11 or PHYS 045 and two of Biology 12, Chemistry 12 or Physics 12.</li> <li>3. Please consult a CNC counsellor concerning specific requirements for UBC and U of A.</li> </ol>
2G	UBC AGSC 100* UBC AGSC 110* BIO 102 MATH 101 CHEM 111 or 113 ENGL 101 or 103 ECON 201	UBC AMSC 258* BIO 101 MATH 102 CHEM 113 or 114 ENGL 102 or 104 ECON 202	<ol style="list-style-type: none"> <li>1. Students interested in Agricultural Science should consult a UBC Agricultural representative or a CNC counsellor.</li> </ol> <p>* Can be taken through UBC Access.</p>
2H	MATH 101 PHYS 101 APSC 100 ENGL 101 or 103 CHEM 111 CSC 109	MATH 102 PHYS 102 APSC 120 ENGL 102 or 104 CHEM 112	<ol style="list-style-type: none"> <li>1. Students planning to enter directly into the first year of UBC's 4 year Applied Science programme must be outstanding high school graduates (see prerequisites) and must be prepared to undertake an intensive workload.</li> <li>2. Prerequisites: Minimum B standing in MATH 12, Physics 12, and Chemistry 12.</li> <li>3. See also Science One.</li> <li>4. Please consult a counsellor concerning additional Mathematics and Physics requirements for entry into Second Year at U.B.C.</li> </ol>



**DEGREES**

The College of New Caledonia offers associate degrees in Arts and in Science for two years of university level study in accordance with the Following requirements. The classification of subjects in Arts (Social Sciences and Humanities) and Sciences is set out in the list following these requirements.

**ASSOCIATE OF ARTS DEGREE**

To be eligible for the Associate of Arts degree, a student must have:

1. completed 60 semester credits of courses that have articulated assigned or unassigned university transfer credit at the 100-level or higher;
2. completed at least 30 of these 60 semester credits at the College of new Caledonia, of which at least 12 credits are in courses that have assigned or unassigned university transfer credit at the 200-level or higher;
3. completed at least 6 semester credits in courses that have assigned or unassigned university transfer credit at the 100-level in English (ENGL 101, 102, 103, 104);
4. completed at least 18 credits in Arts courses (other than English) that have assigned or unassigned university transfer credit at the 100-level; at least 6 of these credits must be in the Humanities (English, French, History, Music, Philosophy), and at least 6 of these credits must be in the Social Sciences (Anthropology, Commerce, Criminology, Economics, Geography (Human) 101, 102, 103, 203, 205, Physical Education, Political science, Psychology, Sociology), and no more than 6 credits shall be in any one subject area;
5. completed at least 18 semester credits in Arts courses that have assigned or unassigned university transfer credit at the 200-level or higher; these credits must be in at least two different subject areas;
6. completed at least 9 semester credits in Science courses, including at least 3 credits in Mathematics or Computing Science or Statistics (i.e. any statistics course that transfers to a university as a 100-level or higher Science course) and at least 3 credits in a laboratory Science course (i.e. any course in the Sciences list worth 3 credits or more and with a lab of at least 2 hours, but excluding any course in Applied Science or Computing Science);
7. completed at least 9 semester credits in courses that have assigned or unassigned transfer credit at the 100-level or higher; credits may be for university transfer courses in subjects listed on the following page or for university transfer courses in other subjects (e.g. Commerce, Physical Education);
8. achieved a grade of at least C in each course counting towards the 60-credit requirement, and a cumulative Grade Point Average of at least 2.0 over all of the courses counting towards the requirement;
9. commencing May 1992 to May 1997, students may apply for an Associate of Arts Degree provided that thirty semester credits be completed within five years preceeding the awarding of the degree. (Commencing May 1998, students must have completed at least three semester credits in the year the degree is awarded.)

**Note:**

1. *No course will be used to meet more than one of the specific requirements.*
2. *Students are advised to consult with a counsellor in order to determine specific course requirements for entry to a particular university degree program.*

**General Course Requirements for Awarding an Associate of Arts Degree**

Courses/ Programs	# of Credits	Total	Conditions
English	6	6	100 level
Arts Courses			100 level
Humanities	6		- excludes English
Social Sciences	6		- only 6 credits maximum
Social Sciences or Humanities	<u>6</u>	18	in one subject area
Arts Courses	<u>18</u>	18	200 Level or Higher - credits must be in at least 2 subject areas
Science Courses			100 Level or Higher
Mathematics or Comp. Science or Statistics	3		
Laboratory Science	3		- requires min. 2 hour lab & excludes any course in Applied or Computer Science
Science Course	<u>3</u>	9	
Electives*	<u>9</u>	<u>9</u>	100 Level or Higher
		60	

**ASSOCIATE OF SCIENCE DEGREE**

To be eligible for the Associate of Science degree, a student must have:

1. completed 60 semester credits of courses that have articulated assigned or unassigned university transfer credit ;
2. completed at least 30 of these 60 semester credits at the College of New Caledonia, of which at least 12 credits are in courses which have assigned or unassigned university transfer credit at the 200-level or higher;
3. completed at least 6 semester credits in Calculus (Math 101, Math 102, Math 201 and Math 202);
4. completed 6 semester credits in first-year (100-level) English (ENGL 101, 102, 103, 104);
5. completed at least 18 semester credits in first-year Science courses (Applied Science, Astronomy, Biology, Chemistry, Computer Science, Forest Science, Geography (Physical) 201, 202, 204, Geology, Mathematics, Physics).
6. completed at least 18 semester credits in second-year Science courses in two or more subject areas;
7. completed at least 6 semester credits in Arts courses at the 100-level or higher, excluding English and excluding Mathematics and laboratory-based Science (ie. "lab science") courses;
8. completed at least 6 semester credits of first-or second-year courses;
9. achieved a grade of at least 'C' in each course counting toward the 60-semester credit requirement, and a cumulative Grade Point Average of at least 2.0 over all the courses counting towards the requirement.
10. commencing May 1992 to May 1997, students may apply for an Associate of Science Degree provided that thirty semester credits be completed within five years preceeding the awarding of the degree. (Commencing May 1998, students must have completed at least three semester credits in the year the degree is awarded.)

**Note:**

1. *No course will be used to meet more than one of the specific requirements.*
2. *Students are advised to consult with a counsellor in order to determine specific course requirements for entry to a particular university degree program.*

**General Course Requirements for Awarding an Associate of Science Degree**

Courses/ Programs	# of Credits Total	Conditions
English	6	100 Level
Calculus	6	- from Mathematics 100, 102, 201 or 202
Science	18	100 Level - only 6 credits maximum in one subject area

Science	18	200 Level - must be in at least 2 subject areas
Arts Elective	6	100 Level or Higher - excluding English, Mathematics and laboratory based science courses
Electives*	6	100 Level or Higher

\* May be Arts or Science courses or other subjects, e.g. Commerce, Business Management, Physical Education with university transfer credits.

**Classification of Subjects for Associate Degrees**

Only those College of New Caledonia courses with articulated university transfer credit and a College of New Caledonia course designation at the 100-level or higher, will count towards the Associate degree.

For the purpose of the above requirements, the College of New Caledonia courses are categorized as follows:

**Arts**

**Humanities:**

English  
French  
History  
Music  
Philosophy

**Social Studies:**

Anthropology  
Commerce  
Criminology  
Economics  
Geography (Human) (101, 102, 103, 203, 205)  
Physical education  
Political science  
Psychology  
Sociology

**Sciences**

Applied Science  
Astronomy  
Biology  
Chemistry  
Computer Science  
Forest Science  
Geography (Physical) (201, 202, 204)  
Geology  
Mathematics  
Physics

*Note: Some courses in the subjects listed above may not carry transfer credit and/or satisfy major requirements at a particular university. Please consult the transfer guide, university calendars or the Counselling and Academic Advising Department.*

**DIPLOMA**

**CRIMINOLOGY**

This programme prepares students for entry into various career options within the criminal justice field. For those planning to further their education, the Criminology Diploma is directly transferable to SFU's School of Criminology, and is equivalent to the first two years of the Bachelor of Arts programme at that institution.

In total, the programme is comprised of twenty courses (60 credits). It entails two years of practical and theoretical instruction, with an emphasis on the provincial criminal justice system, and Northern B.C. practices and institutions. Students gain insight into criminological research methods through computer training, and by working directly with criminal justice system personnel in the articulation, design, analysis and presentation of research issues.

**Programme Requirements**

<b>Group A</b>	<b>Group B</b>	<b>Group C</b>
CRIM 101	COMM 222	Any CNC
CRIM 102	ECON 101	course carry-
CRIM 103	ECON 102	ing direct
CRIM 106	ENGL 103*	university
CRIM 120	HIST 104	credit
CRIM 135	PHIL 101	transfer to SFU
CRIM 230	PSYC 102*	
and		3 credit hours
CRIM 201	PHIL 102	
or	PSCI 131*	
CRIM 241	PSYC 101*	
	PSYC 201*	
	SOCI 101*	
	SOCI 102*	
24 credit	all courses which	
hours	are asterisked (*)	
	must be taken	
	plus 3 electives	
	chosen from	
	above list	
	27 credit hours	

*Note: CRIM 135 and CRIM 230 are presently being articulated.*

**CO-OPERATIVE EDUCATION**

Students planning to transfer to Co-operative Education programmes in Science and Engineering at the University of Victoria can complete up to two work terms while studying at CNC. More information may be obtained by contacting the Co-operative Education Office at 561-5806.

**EDUCATION**

The New Caledonia Teacher Education Consortium (NEW CAL TEC) programme, established in conjunction with SFU, offers students the opportunity to complete a teaching certificate or Bachelor's degree in Prince George. Students interested in this option should enroll in package 1C. Upon completion of five semesters of academic work, students will be accepted into the SFU Professional Development Programme (PDP) based on satisfactory work experience and academic performance records. In September 1993, a package of third year SFU courses ( to be announced) may be offered in Prince George.

**FINE ARTS**

CNC co-operatively offers the Foundation (first) Year of the Emily Carr College of Art and design (ECCAD) Fine Arts Diploma. This very successful programme has recently been enhanced with an agreement between Open University and ECCAD to have students who complete additional academic course work at a community college or university become eligible for a Bachelor of Fine Arts degree from the Open University. Minimum enrollment is required. Students are encouraged to register early!

**Course Outline:**

- Survey of Western Art
- Graphic Design
- Color - An Introduction
- Print Making
- Drawing and 2D Language
- Painting
- 3D Materials and Form
- Ceramic Sculpture
- Creative Processes

**HUMANITIES**

Humanities is a non-disciplinary programme based on a reading list of great works of literature, philosophy, history, etc. The programme is designed to provide the first-year student with comprehensive practice in reading significant works intelligently and in thinking, talking and writing about those works. Considerable emphasis is placed on essay-writing: five major essays per semester are required.

Humanities is team-taught by two or more instructors of different academic specializations. The instructors use both lecture and seminar formats and meet frequently with students on an individual basis to assess progress and help with difficulties.

A limited number of students will be accepted into the Humanities programme. The programme carries credit for

three courses per semester and demands a proportionate amount of students' time. In order to receive credit for a full first year, students must take two additional regular courses each semester.

Students interest in this program would obtain a more detailed outline from either the counsellors or one of the Humanities instructors.

*Note: The Humanities programme is most beneficial to students who remain in the programme for both semesters (i.e. Humanities 101 and 102). Students who enter the programme in the fall semester are strongly encouraged to commit themselves to remaining in the Humanities program for both Fall and Spring semesters.*

### SCIENCE ONE

Science One is an interdisciplinary science and engineering programme intended for students who are committed to a career in the sciences or applied sciences and who have achieved high standing in previous science courses. The programme provides a challenging and stimulating enrichment to the normal first-year package programmes 2A, 2D, and 2H.

The programme consists of designated laboratory sections of BIO 101/102, CHEM 111/112, and PHYS 101/102 with specially designed lab activities. In addition, two one hour per week seminar courses, Science 101/102, provide a forum for discussion of career information and contemporary science related issues.

Admission is limited to twenty students selected on the basis of academic achievement and suitability for interdisciplinary studies.

### Course Descriptions

The number in parenthesis at the end of the descriptions indicates the number of lecture hours and lab or seminar hours per week. Thus (3,2) indicates 3 hours of lecture and 2 hours of lab or seminar per week. Students who take courses which consist of both lecture and lab sections must achieve a passing grade for both the lecture and the lab in order to receive a passing grade in the course.

Course transfer information is contained in the British Columbia Transfer Guide published by the British Columbia Council on Admissions and Transfer (available in the CNC Counselling Department) to verify transferability of credits.

#### ANTH 101 Introduction to Socio-Cultural Anthropology 3 CR

This course examines major institutions in a variety of societies: subsistence, belief, power, law, health, marriage, family, language and change. It also explains the theories used by anthropologists to understand human behaviour cross-culturally. (3,0)

#### ANTH 102 Introduction to Physical Anthropology and Archeology 3 CR

This course investigates the origins of humans; examines the evidence for Darwinian Evolution; explores our relationship with other primates; and examines the oldest civilizations. (3,0)

#### ANTH 201 Social Structure I - Ethnography 3 CR

An examination of the ethnological approach to culture and society with a focus on the social/cultural varieties of religious belief and expression.

**Prerequisite:** ANTH 101 or permission from instructor(3,0)

#### ANTH 202 Social Structure II - Theory and Method 3 CR

Examination of major concepts used in structural anthropology (role, social structure, institution, etc.). This examination will be framed within the context of the anthropological exploration of Canadian First Nations cultures.

**Prerequisite:** ANTH 101 or permission from instructor(3,0)

#### APSC 100 Introduction to Engineering 0 CR

This is a mandatory non-credit course for Engineering students. The student is provided an opportunity to meet practising engineers and discuss their areas of specialization. (1,0)

#### APSC 120 Engineering Drawing 3 CR

This is an introductory mechanical drafting and computer aided drafting course for those students who are interested in a degree in Engineering. Topics covered are orthographic projection, technical sketching, engineering geometry, graphic solution of space and vector problems, azimuth and bearing problems, contour lines, cutting planes and developments, graphical integration and differentiation, logarithmic graphs and presentation of engineering data on graphs. (3,0)

#### ASTR 105 Introductory Astronomy 3 CR

An introductory course for the non-science student. Topics

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include: A brief history of astronomy, ancient to modern; the methods and tools of astronomy; the earth, moon and solar system; the sun; properties of stars; multiple systems; variable stars; stellar evolution and the death of stars; the Milky Way; distant galaxies and cosmology. Students will be participating in several observing sessions. (3,0)

### **BIO 101 Biology for Science Majors I 3 CR**

This course examines the nature of Biology as a science, the origin of life and structure and function of biological molecules. The processes of fermentation, respiration and photosynthesis and the structure and function of DNA will be examined.

**Prerequisites:** Biology 045 or Biology 11 and CHEM 045 or Chemistry 11 (not a prerequisite for BIO 102; offered in the Spring Semester) (3,3)

### **BIO 102 Biology for Science Majors II 3 CR**

This course surveys the diversity of life. Evolutionary and ecological processes will be discussed. The principles of Mendelian genetics will be introduced. Human origins will be described.

**Prerequisites:** Biology 045 or Biology 11 and CHEM 045 or Chemistry 11 (offered in the Fall semester; may be taken without BIO 101) (3,3)

### **BIO 103 Biology for Non-Majors I 3 CR**

Planning a career in the Arts, Social Sciences or Humanities? This course, together with BIO 104, will meet your degree or certificate requirement for a "lab science". It is a general course, surveying biological topics of interest in modern society: biological molecules, basic cell structure and functions, genetics, the origin of life and selected topics. (3,3)

### **BIO 104 Biology for Non-Majors II 3 CR**

This is the companion course to BIO 103, to complete the "lab science" requirement of degree/certificate programmes in the Arts, Social Sciences or Humanities. Topics discussed are: Ecology (energy transfer, nutrients, population growth and stability), Human Biology (ecology, pollution), and Economic Botany (plant anatomy, origin of the world's food crops, exploration/resource utilization of the globe). (3,3)

### **BIO 201 Cell Structure 3 CR**

Beginning with experimental techniques, this course covers physical and chemical aspects of biological structure in prokaryote and eukaryote cells. Additional topics include cell events (mitosis, meiosis and movement) and correlations of structural diversity with functional specialization.

**Prerequisites:** BIO 101 and 102, CHEM 111 and 112 or CHEM 113 and 114.

**Prerequisite or Corequisite:** CHEM 203 (3,3)

### **BIO 202 Cell Chemistry 3 CR**

An introductory course dealing with the chemical basis of life. This course emphasizes basic life processes; energy conversion, transfer and storage. Cell structures are discussed from the stand-point of their roles in all aspects of energetics.

**Prerequisite:** BIO 201

**Prerequisite or Corequisite:** CHEM 204 (3,3)

### **BIO 205 Introduction to Microbiology I 3 CR**

A historical perspective of microbiology, followed by topics which include a survey of the bacteria, bacterial cell structure in relation to its function, bacterial growth kinetics and a survey of the lower protists. An introduction to virology and bacterial metabolism, including environmental factors which affect microbial growth and survival will also be presented.

**Prerequisites:** BIO 101 and 102

**Prerequisite or Corequisite:** CHEM 203 (3,3)

### **BIO 206 Introduction to Microbiology II 3 CR**

This course will include an introduction to the genetics of bacteria and viruses; sporulation as a form of bacterial differentiation; immunology, including both antibody and cellular responses to antigen and an analysis of host-parasite relationships.

**Prerequisite:** BIO 205

**Prerequisite or Corequisite:** CHEM 204 (3,3)

### **BIO 207 Comparative Anatomy of Vertebrates 3 CR**

A systematic approach to the comparative anatomy of the vertebrates. Organisms exhibiting a variety of morphological advances will be dissected in the laboratory.

**Prerequisites:** BIO 101 and 102 (3,3)

### **BIO 209 A Survey of Non-Vascular Plants 3 CR**

A survey of the algae, fungi, lichens and bryophytes. Evolutionary trends in form and function are studied, as related to environmental adaptation.

**Prerequisites:** BIO 101 and 102, or BIO 103 and 104 and permission of the instructor. (3,3)

### **BIO 210 Vascular Plants: A Comparative Study 3 CR**

Beginning with psilophyta, the tracheophyte divisions are discussed. Topics include geologic history and origin, morphogenesis and comparative functional morphology of tissues and organs.

**Prerequisites:** BIO 101 and 102, or BIO 103 and 104 and permission of the instructor. (3,3)

### **BIO 211 Invertebrate Zoology 3 CR**

A systematic treatment of the invertebrates following evolutionary trends in form and function. A representative selection of invertebrates will be examined in the laboratory.

**Prerequisites:** BIO 101 and 102 (3,3)

### **CHEM 111 Fundamentals of Chemistry I 3 CR**

This course is for students who have passed B.C. Chemistry 12 within the last two years, and who intend to take applied science, medicine, or other science programmes at university. Topics covered are modern bonding theories, properties of molecules and organic chemistry.

**Prerequisite:** Chemistry 12 or CHEM 050, with a "C" or better recommended. (Note: Prerequisites: MATH 12, or MATH 050 with a "C" or better may be required for September 1993) (3,3)

**CHEM 112 Fundamentals of Chemistry II 3 CR**

This course includes thermodynamics, a quantitative discussion of equilibrium and ionic solutions, and reaction kinetics. Together with CHEM 111 this course gives credit for first year university chemistry at an appropriate science major, applied science and premed. level.

**Prerequisite:** Chemistry 12 or CHEM 050, with a "C" or better recommended. (Note: Prerequisites: MATH 12, or MATH 050 with a "C" or better may be required for September 1993) (3,3)

**CHEM 113 Introduction to Chemistry I 3 CR**

This is a general chemistry course primarily intended for students without Chemistry 12 and whose major programme areas require one or two years of university level chemistry. Topics include stoichiometry, and atomic structure, periodic table, bonding and organic chemistry.

**Prerequisite:** Chemistry 11 or CHEM 045 (4,3)

**CHEM 114 Introduction to Chemistry II 3 CR**

This is a general chemistry course primarily intended for students without Chemistry 12 and whose major programme areas require university-level chemistry. Topics include thermodynamics, solution equilibria, acids and bases, electrochemistry and kinetics. It is recommended that students take CHEM 113 prior to taking CHEM 114.

**Prerequisite:** Chemistry 11 or CHEM 045 (4,3)

**CHEM 201 Physical Chemistry 3 CR**

This course, a survey of physical chemistry, is suitable for students majoring in science programmes such as chemistry, physics, biology and pharmacy. The course comprises a discussion of the laws of thermodynamics followed by a treatment of the equilibrium thermodynamics of gases and solutions.

**Prerequisite:** CHEM 112 or 114 (3,3)

**CHEM 202 Inorganic and Co-ordination Chemistry 3 CR**

With CHEM 201, this course forms a second year chemistry course for science major students. The structure, bonding and properties of transition metal and other complexes are discussed.

**Prerequisite:** CHEM 111 or 113. (3,3)

**CHEM 203 Organic Chemistry I 3 CR**

The course provides an introduction to organic chemistry. A survey of structure and reactivity for the major functional groups is followed by an introduction to analysis and structure determination. A major topic on chirality and conformational analysis is included. Laboratory experience includes an introduction to synthetic methods and infrared spectroscopy.

**Prerequisite:** CHEM 111 or 113. (3,3)

**CHEM 204 Organic Chemistry II 3 CR**

Mechanism and synthesis are discussed as central themes in organic chemistry. This course surveys substitution, addition, elimination, rearrangement and oxidation reduction reactions for the functional groups introduced in CHEM 203. Additional topics in carbonyl and carbohydrate chemistry are

included, as is an introduction to nuclear magnetic resonance. Laboratory experiments provide experience in contemporary synthetic methods and gas chromatography.

**Prerequisite:** CHEM 203 (3,3)

**COM 204 Financial Accounting 3 CR**

Introduction to accounting procedures, principles, and statement presentation with emphasis on the relevance of accounting information for business decision-making. The main balance sheet items will be studied in detail; corporate taxation will be introduced. (3,0)

**COM 209 Introduction to Decision Analysis 4 CR**

This course is designed to help students organize, process and interpret quantitative information. The idea of probability, or "calculated risk", is introduced to evaluate certain types of business decisions. Topics: quantitative techniques (linear programming, inventory order size), data analysis (averages, deviations, positional measures and graphs), probability (random variables, theory, expectation), probability distributions (binomial, poisson, normal), decision theory (uncertainty, expectation, utility).

**Prerequisite:** Math 101 or Math 157 (3,2)

**COM 210 Application of Statistics in Business 4 CR**

This course develops the students' conceptual ability to draw conclusions from samples of information. It focuses on assessing the reliability of information, identifying the degree of relationships between variables and on identifying trends or patterns. Topics: hypothesis testing, correlation, regression, exponential smoothing.

**Prerequisites:** COM 209 (3,2)

**COM 212 Managerial Accounting 3 CR**

Introduction to the development and use of accounting information for management planning and control and the development of cost information for financial reports. Major topics include job and process costing, cost allocation, cost behaviour, cost-volume-profit analysis, budgeting, standard costing and variance analysis.

**Prerequisite:** COM 204 (3,0)

**COM 213 Introduction to Business 2 CR**

Students are introduced to the major parts of a business: marketing, finance, management, and its relationship with the environment. The course helps develop one's skills in computer business literacy, functioning as a member of a "team" to critique business problems, and to actively participate in discussions.

**COM 214 Capital Markets and Institutions 3 CR**

This course emphasizes the financial markets. This includes sources and uses of funds, the financial intermediaries through which funds flow, and how interest rates move up and down as a result. Topics: capital budgeting and discounted cash flow, macroeconomic factors that influence interest rates, long term and short term sources of funds, and portfolio theory.

**Prerequisite:** ECON 101 or ECON 201 or ECON 251 (3,0)

**COM 222 Management and Organizational Behaviour 4 CR**  
 Information extracted from various areas of psychology (social, industrial/organizational) and management will be utilized to study the nature of work, people and organizations. Topics include: leadership, motivation, group dynamics, communication, Japanese management, job design, organizational design, culture and climate, organizational change, power, stress and time management, and human resource management/development issues. Organizational behaviour will be examined through lecture, discussion and practical applications of learned materials. (4,0)

**CSC 100 Introduction to Computer Programming 3 CR**  
 This course is for those who are not prepared to enroll in CSC 109, and its main goal is to familiarize students with writing computer programs in Pascal. No prior knowledge of computing or advanced mathematics is required. Those who successfully complete this course will be well-prepared to continue with CSC 109.  
**Prerequisite:** MATH 11 or MATH 045 (3,3)

**CSC 109 Computing Science I 3 CR**  
 This is a general introductory course in computer science. The topics include computer architecture, computer systems, development of algorithms and computer programs, and programming style. The programming topics include selection and loop structures, arrays, functions, procedures, and string processing. The main emphasis of this course is on the study and development of algorithms. Modula-2 is the programming language used in the course.  
**Prerequisite:** MATH 12 or MATH 050 Students with a grade of "B" or better in CSC 12 may take CSC 110 instead of CSC 109 (3,3)

**CSC 110 Computing Science II 3 CR**  
 This is a continuation of CSC 109 and more advanced algorithms and computer programs are developed. The topics include advanced string processing, sets, recursion, and linear and non-linear data structures. Modula-2 is the programming language used in the course.  
**Prerequisites:** CSC 101 or 109 or a grade of 'B' or better in CSC12  
**Prerequisite or Corequisite:** MATH 101 (3,3)

**CSC 210 Numerical Methods 3 CR**  
 This course is an introduction to the numerical techniques used in the solution of mathematical problems. It is intended for students in mathematics, computer science and applied science. Students will learn to use a library of programs to solve numerical problems, and also to write their own programs. FORTRAN 77 is the programming language used in the course.  
**Prerequisites:** CSC 110 and MATH 201  
**Prerequisites or Corequisites:** Math 202, 215, and 204(3,3)

**CSC 214 Introduction to Computer Systems 3 CR**  
 This course is an introduction to the basic concepts of computer systems and computer architecture, and to machine and assembly language. Students will be expected to master

both the basic concepts of computer systems and architecture, and the programming details of an assembly language. The assembly language of the VAX-11 will be used in programming assignments.  
**Prerequisite:** CSC 110 (3,3)

**CSC 216 Introduction to Data Structures 3 CR**  
 This course is an introduction to data structures and their associated algorithms. The data structures discussed will include stacks, queues, lists and trees. Data structures applications will include sorting techniques, hash tables, sparse matrix representation, and priority queues. Modula-2 will be the programming language used in the course.  
**Prerequisite:** CSC 110 (3,3)

**CSC 220 Introduction to Discrete Structures 3 CR**  
 This course introduces the student to the mathematical models and formalisms in Computer Science and Mathematics. A set of topics that are of genuine use in Computer Science and Mathematics is discussed including set theory, logic, combinatorics, inductive and deductive proofs, finite-state machines and formal languages. Most of the concepts discussed are applicable in areas such as: set theory, lattices and Boolean algebra, sorting and searching, as well as construction of the logical representation of computer circuits.  
**Prerequisites:** MATH 101 and 102  
**Prerequisites or Corequisites:** MATH 204, CSC 110(3,0)

**CSC 224 Computer Organization 3 CR**  
 This course is an introduction to the internal structure (at the logic block level) of the major components of modern digital computers and it is not a programming course. Starting with basic logic gates, complex devices are designed, and they are, in turn, used to design a simple computer. Also, a sequence of register transfers for many of the macro instructions is developed. Finally, the major functional sections of a computer—main memory, micro-programmed control, ALU, I/O bus structures, interrupts — are studied.  
**Prerequisite:** CSC 220 (3,3)

**CRIM 101 Introduction to Criminology 3 CR**  
 This course is an introduction to the interdisciplinary subject of criminology. The topics explored include a historical analysis of the development of criminology as a scientific discipline, its methods of analysis and the various theoretical explanations for crime, criminality, and social control. The course will also focus on current issues related to crime and the administration of criminal justice. (3,0)

**CRIM 102 Psychology of Criminal and Deviant Behaviour 3 CR**  
 This course examines various theoretical approaches to the psychology of criminal and deviant behaviour. It commences with historical perspectives that are based upon internal, biological contracts and progresses through the psychoanalytical and type theories to a social learning perspective including the social-structural and symbolic-interactionist theory.  
**Prerequisite:** CRIM 101 or PSYC 101 (3,0)

**CRIM 103 Introduction to the Criminal Justice System 3 CR**  
 An introduction to the legal and social organization of the Canadian Criminal Justice System. The accused is followed from initial contact with the police to a final disposition on the street, at court, or in the correctional system. The rights, responsibilities and discretion of all participants in the proceedings will be examined in detail. The processing and treatment of offenders in Canada will be evaluated in terms of fairness and effectiveness. (3,0)

**CRIM 106 Sociological Explanations of Crime and Deviance 3 CR**  
 The major sociological perspectives and theories will be presented and applied to various types of crimes and deviance. The assumptions, consistency and completeness of these accounts will be critically assessed. Findings for and against these theories will be evaluated. Finally, the practical implications of these approaches will be discussed.  
**Prerequisite:** SOC 101 or CRIM 101 or 103 (3,0)

**CRIM 120 Research Methods in Criminology 3 CR**  
 Introduction to practice of research methods in criminology. Study of theory, logic, process and structure of research as well as research design, data collection and analysis. Introduction to research report writing. Hands-on computer experience and direct working interaction with local criminal justice system agencies.  
**Prerequisites:** PSYC 201 and 4 of CRIM 101, 102, 103, 106, 241 (3,1.5)

**CRIM 135 Introduction to Canadian Law and Legal Institutions 3 CR**  
 This course provides a general introduction to the fundamental and competing principles of jurisprudence and to the basic legal institutions of Canada. The course is designed to prepare students for those law and law related courses offered within the Department of Criminology and will consider the history of Canadian law, the development of the Canadian constitution, the system of Canadian courts and the roles of responsibilities of member of the legal profession. In addition, the course will consider the nature of legal reasoning, the doctrine of precedent, principles of statutory interpretation and will also introduce the fields of contract, torts, administrative law and family law. The course will also examine the process of law reform in Canada.  
**Prerequisite:**None (3.0)

**CRIM 201 Policing in Modern Society 3 CR**  
 This course examines both historical and current issues related to policing in modern society. Topical emphasis will be on police roles, powers, accountability, discretion, surveillance and technology. Analysis of these issues will be comparative between 'public' and 'private' methods of policing.  
**Prerequisites:** CRIM 101 and 103 (3,0)

**CRIM 230 Criminal Law 3 CR**  
 Nature, purpose, scope, sources and basic principles of the criminal law. History and evolution of the criminal law.

Study of certain fundamental legal concepts such as *men rea*, negligence and strict liability. Analysis of the concept of criminal responsibility in Canada. Critical examination of the legislative policies expressed in the Criminal Code. Study of the basic elements of a criminal offence; *actus reus* and *mens rea*. Examination of the legal principles relating to certain specific crimes and to certain major defences. CRIM 135 is strongly recommended. (3.0)

**CRIM 241 Introduction to Corrections 3 CR**  
 Introduction to the Canadian Correctional System. History and development of prisons in Canada. Examination of punitive philosophies in Canada. Structure, organization and dynamics of correctional institutions. Examination of treatment and programming in Canadian Corrections.  
**Prerequisites:** CRIM 101 and 103 (3,0)

**ECON 101 Introduction to Economics 3 CR**  
 An introduction to Economics and the Free Enterprise Economy. Topics include: an overview of economic systems, supply and demand and various product, labour and financial markets; organization and behaviour of business under different industry environments; topics in consumerism. Throughout, issues related to the national, provincial and local economy will be discussed. (3,0)

**ECON 102 Canadian Economics Issues 3 CR**  
 This course reviews current (mostly Macro-economic) issues such as unemployment, inflation, taxation, the role of government in the macro-economy, international trade, and GNP/ GDP. Current events are dealt with at length. Both ECON 101 and 102 are aimed at the liberal arts student who may not pursue a degree in Commerce or Economics, but wishes to become more familiar with the economic issues of the day as reported in the media. (3,0)

**ECON 201 Principles of Economics -Microeconomics 3 CR**  
 An examination of the concepts in the words "demand and supply". Components of demand by both firms and households are analyzed. A theory of pricing in different market structures is developed in conjunction with the derivation of costs to firms. (3,0)

**ECON 202 Principles of Economics - Macroeconomics 3 CR**  
 This course explores the forces affecting an economy. The motivations and interactions of households, the business sector, government, and foreign sectors are emphasized. The role of money in a modern economy is dealt with at length. (3,0)

**ECON 215 Intermediate Microeconomic Theory 3 CR**  
 This course extends the foundations laid in ECON 201 to a more "in-depth" analysis of consumer and producer theory, industrial organization, markets for the factors of production, and the role of government. Applications of microeconomic theory to real-world problems is stressed throughout the course.  
**Prerequisites:** ECON 201 and MATH 101 (3,0)



## UNIVERSITY CREDIT PROGRAMMES

**EGEO 101 Introduction to Physical Geology (Engineering) 3 CR**

The topics covered include the development, structure, concepts and methods of modern geography plus Geologic time. Practical and engineering aspects will be stressed.

**ENGL 101 Literature and Composition I 3 CR**

A study of the 20th Century short story and drama, and a consideration of effective composition practices. Students will write a minimum of three essays. (3,0)

**ENGL 102 Literature and Composition II 3 CR**

A study of the 20th Century poetry and novels, and a consideration of effective composition practices. Students will write a minimum of three essays. (3,0)

**ENGL 103 Composition and Style 3 CR**

A study of grammar, composition, style, and research techniques. A vigorous programme of essay writing plus a variety of writing assignments or exercises dealing with specific problems in essay writing. Strongly recommended for students who wish to improve their writing skills. (3,0)

**ENGL 104 Introduction to Literature and Composition 3 CR**

A survey of selected stories, poems and plays from the classical to the modern periods. Another first year college level English course is a suggested prerequisite. Students will write essays and exams. (3,0)

**ENGL 106 Film Studies 3 CR**

A survey of styles and genres in International and Hollywood Cinema from 1940 to the present. A feature film will be screened each week and discussed in conjunction with assigned readings. University credit students will write essays and exams; non-university credit students may audit the course for general interest. (1,2)

**ENGL 107 Literature and Composition: First Nations' Literature (Proposed Offering) 3 CR**

This first year course will focus on a broad spectrum of Native Literature. Students will assess traditional tales from an oral story telling tradition as well as poems, plays and short stories by contemporary native writers. As well, the student will learn effective composition skills and the techniques of literary analysis. Students will be required to write a minimum of three major papers. (3,0)

**ENGL 201 English Literature, 1350-1688 3 CR**

A survey of English Literature from Chaucer to Milton based on a selection of poetry from major authors. Students are required to submit at least three essays on literary topics.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 202 English Literature, 1688-1900 3 CR**

A survey of English Literature from Dryden to Hopkins based on a selection of works from major authors. Students

will submit at least three essays on literary topics.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 203 Canadian Literature I 3 CR**

An introduction to the study of Canadian Literature involving writers from beginning to the 1940's. Journals, poetry, and fiction will be included. Students are required to submit three essays on literary topics.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 204 Canadian Literature II 3 CR**

A study of the development of poetry, fiction, drama, and essays from 1940 to the present. Students will be required to submit a minimum of three essays on literary topics.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 205 Creative Writing 3 CR**

Creative Writing is a university transfer workshop/writing course meant to provide a context in which beginning and seasoned writers can present their work (poetry, fiction, and drama) for comment and criticism. The lectures, assignments, and seminar discussions will involve a wide range of topics meant to reveal possible approaches to language and writing, and to stimulate improvement of the work submitted for discussion and evaluation.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 206 Creative Writing 3 CR**

This course is a continuation of ENGL 205.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 213 Short Fiction I 3 CR**

A survey of the short story and novella from Poe to Lawrence. Students will be required to write at least three essays on literary topics.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 214 Short Fiction II 3 CR**

A survey of the short story and novella from Kafka to the present. Students will be asked to write at least three essays on literary topics.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 215 Children's Literature I 3 CR**

A study of children's literature focussing on the different genre: fantasy, realistic fiction, science fiction, historical fiction, etc.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 216 Children's Literature II 3 CR**

English 216 is a continuation of English 215. Ideally English 216 would be preceded by English 215. However students could take only one of the two courses, or they could take this course out of sequence. While English 215 is organized around the different genres, English 216 will take an historical approach to the study of children's literature. We will examine representative literature from the Victorian period to the Modern period. The course will address the question of how our definitions of children's literature and our attitudes towards children's literature have changed over the years.

**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3,0)

**ENGL 217 Women in Literature I 3 CR**  
 This course will focus on techniques of literary study, with emphasis on the ways in which women are represented in and have contributed to the literary tradition. Focusing on literary, feminist and general social - cultural concerns, the course will provide a fresh insight into our literary traditions. Students will be asked to write at least three essays on literary topics.  
**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (3)

**ENG 218 Women in Literature II 3 CR**  
 This course will explore gender and literary theory from a feminist viewpoint. This course will explore some of the controversies which have arisen in the study of literature and some of the ways in which feminist ideas and practices are changing the way in which literature is read and taught. We will study several novels, plays, short stories and poems and consider how these writers spoke to an audience of women at the time they were written and what message they have for contemporary audience. Students will be asked to write at least three essays on literary topics.  
**Prerequisites:** 2 of ENG 101, 102, 103, 104 (3,0)

**ENGL 231 Intermediate Composition I 3 CR**  
 Students will study and practice the principles of effective prose. They will write a variety of expository and argumentative essays (some done in class) and a final examination. Students will develop competence and flexibility in their writing skills through the practice of a variety of stylistic and organizational techniques. Recommended for students interested in the teaching profession. NOTE: This is not a remedial or basic skills course.  
**Prerequisites:** 2 of ENGL 101, 102, 103, 104 ((2,1)

**ENGL 232 Intermediate Composition II 3 CR**  
 Students will write a variety of expository and argumentative essays (some done in class) and a final examination. Particular emphasis will be placed upon the production of a major research report (minimum length 2,000 words) with full documentation. Recommended for students interested in the teaching profession.  
**Prerequisites:** 2 of ENGL 101, 102, 103, 104 (2,1)

**FORS 100 Introduction to Forestry 2 CR**  
 History of forestry and the forestry profession, present status and role of forestry, forest policy, and future trends in the forest resource use. (2,0)

**FORS 111 Dendrology I 3 CR**  
 This course covers both morphology (identification) and functioning (physiology) of trees. The lectures cover structure and function of seed, roots, stem, and leaves; tree growth; dormancy and stand development. The labs concentrate on recognition of B.C. and Canadian species of broadleaf trees, with experimental assignments to reinforce lecture material.  
**Prerequisite:** Biology 11 or BIO 045 (3,2)

**FORS 112 Dendrology II 3 CR**  
 A continuation of FORS 111, this course concentrates on the function of trees (water relations, photosynthesis, respiration), reproduction, forest regions of Canada, ecological

classification, geographical distribution, elementary B.C. conifers, and the more important North American/World species. Analytical and experimental labs will be assigned.  
**Prerequisite:** FORS 111 (3,2)

**FORS 202 Forest Ecology 3 CR**  
 The ecosystem concept; energy biomass and nutrient cycling; the physical environment; population and community ecology; ecological succession. Introduction to the biogeoclimatic classification of B.C., and some Central Interior ecosystems. A plant herbarium of 50 vascular plants and mosses required. (3,2)

**FORS 203 Silvics of Forest Trees of Western Canada 3 CR**  
 Ecological and silvical characteristics of forest trees of western provinces; assessment and ecological site quality; application of silvics in silviculture. (3,2)

**FORS 210 Introduction to Forest Soils 3 CR**  
 This course covers the physical, chemical and biological properties of soils; soil formation, classification, use and conservation of forest soils. (3,2)

**FORS 213 Land Survey 3 CR**  
 An introduction to the basic techniques of surveying, with special emphasis on the problems encountered in a forest environment. This course is taken during the week preceding the beginning of lectures in the second year and for five consecutive Saturdays.

**FORS 237 Introduction to Forest Mensuration and Photogrammetry 3 CR**  
 Measuring and estimating tree volumes, form and taper; timber scaling and grading; computer applications; basic photogrammetry, mapping for photography and photo-based inventory systems.  
**Prerequisite:** Math 104 (3,2)

**FORS 238 Forest Mensuration 3 CR**  
 Forest inventory methods; growth and yield prediction; applications of multiple linear regression and sampling techniques; introduction to multiple resource inventories.  
**Prerequisites:** FORS 237, MATH 102 (3,2)

**FREN 101 Intermediate College French, Level 5 3 CR**  
 NOTE: Students with preparation in French other than specific course prerequisites may be admitted to courses. Please contact a counsellor.

This course consists of three parts:  
 1) A review of the essential structures of French grammar;  
 2) French conversation;  
 3) Exercises in comprehension of oral French.  
 Conversation classes will be based on current social issues. The course is conducted in French.  
**Prerequisite:** French 12 (3,1.5)

**FREN 102 Intermediate College French, Level 6 3 CR**  
 This course consists of three parts:

- 1) Continuation of review of the essential structures of French grammar;
- 2) Writing Practice;
- 3) Literary analysis

The course is conducted in French.

**Prerequisite:** FREN 101 minimum 'P' grade (3,1.5)

**GEOG 101 Man's Sense of Place: An Introduction to Human Geography 3 CR**

This course serves as an introduction to the development, structure, concepts, and methods of modern Human Geography. Students will be introduced to the many sub-fields of Human Geography, including Urban Geography, Cultural Geography, Environmental Geography, Historical Geography, Regional Geography, Political Geography and Economic Geography. This course is not only important to those students who wish to study for a B.A. in Geography; it will prove useful for those students who wish to enter programmes in Architecture, Urban and Regional Planning, Education, etc. (3,3)

**GEOG 103 Canada: Some Geographical Perspectives 3 CR**

An introduction to the geographical character of Canada. Emphasis is on an examination of the development of settlement patterns, the Canadian urban system, changes in rural Canada, resource development, and the characteristics of the North. This course may be useful for students wishing to enter programmes in elementary and secondary education (3,0)

**GEOG 201 Weather and Climate 3 CR**

This course is a laboratory science course which provides an introduction to the major concepts in the sub-disciplines of meteorology and climatology. Emphasis will be on the analysis of processes, distributions and interrelationships. It is a required course for a B.Sc. degree in Geography. (3,3)

**GEOG 202 The Surface of the Earth 3 CR**

This course is a laboratory science course. It provides an introduction to the major systems, cycles and processes which cause and sculpture the landforms of the Earth's surface. It is a required course for a B.Sc. degree in Geography. Geography 202 is combined with Geography 201 to make up a full introductory Physical Geography course.

**Prerequisite:** GEOG 201 (3,3)

**GEOG 203 Economic Geography 3 CR**

A geographic view of economic activities and behaviour, using both a "systems" and "behavioural" approach. Traditional and more recent theories of Economic Geography will be examined in the light of these two approaches. This course may be useful for students wishing to enter programmes in Economics, Commerce, Appraising, and Municipal Administration.

**Prerequisites:** GEOG 101 and 103 (3,0)

**GEOG 204 Forest and Agricultural Climatology 3 CR**

Basic principles and processes of climatology; energy and

water balance concepts; motion and weather systems; microclimate of soils, crops, forests and animals; microclimate modification and air pollution; climate classification and land capability. (3,2)

**GEOG 205 The Evolution of the Cultural Landscape 3 CR**

An investigation of the dynamic nature of the Man/land relationship in terms of cultural, sociological, institutional, and psychological influences upon Man's use and organization of his environment.

**Prerequisites:** GEOG 101 and 103 (3,0)

**GEOL 101 Earth Materials 3 CR**

An introduction to the origin, history and structure of the earth will be followed by detailed study of mineral and rock types. Sedimentary environments will be discussed in connection with sedimentary rock types. Minerals and rocks will be examined in the laboratory. Biology 11 (or BIOL 045) or Biology 12 (or BIOL 050) and Chemistry 11 (or CHEM 045) or Chemistry 12 (or CHEM 050) are recommended but not required. (3,3)

**GEOL 102 Historical Geology 3 CR**

Geological structures, correlation, geologic time, palaeontology and climate will be discussed before tackling the historical geology of North America. These topics will be explored in a series of labs, including field trips (weather permitting). Biology 11 (or BIOL 045) or Biology 12 (or BIOL 050) and Chemistry 11 (or CHEM 045) or Chemistry 12 (or CHEM 050) are recommended but not required. (3,3)

**HIST 101 World History: The Early Twentieth Century 3 CR**

A survey of significant events from the 1890s to 1939, with particular emphasis on the First World War, the instability of the 1920s and 1930s, the rise of Japan, and the road to World War II. (3,0)

**HIST 102 World History: The Mid-Twentieth Century 3 CR**

A sequel to HIST 101 covering the Second World War, struggles in the Third World, America's victory over the Soviet Union in the Cold War, and the emergence of new superpowers in Japan and the European Economic Community. (3,0)

**HIST 103 History of Canada to 1867 3 CR**

A survey of social, economic and political developments. Topics include native-white relations, early exploration, imperial rivalries, political reform and social conflict. (3,0)

**HIST 104 History of Canada since 1867 3 CR**

A sequel to HIST 103. Emphasis is placed on Confederation, the Riel Rebellion, immigration, urbanization and industrialization, the evolution of foreign policy. (3,0)

**HIST 204 History of the Prairie West 3 CR**

A lecture/seminar surveying prairie development from the mid-19th century to the present, focusing on natives and the fur trade, colonial institutions and provincial status, immigration, agriculture, wars, decades of discord, the origin of third

parties and post-war economic and political development.

**Prerequisite:** HIST 101 or 102 or 103 or 104 (3,)

**HIST 205 History of B.C. 3 CR**

A lecture/seminar surveying B.C. with emphasis on aboriginal culture, resource development, ethnic relations, labour, wars, depression, and the development of provincial politics.

**Prerequisite:** HIST 101 or 102 or 103 or 104. (3,0)

**HIST 206 Pre-Confederation British North America 3 CR**

A lecture/seminar course focusing on social, economic and political developments in BNA from 1759 to 1867. Students will study the impact of the conquest, the Maritime colonies, Upper Canada/Canada West and Lower Canada/Canada East, as well as the prairies and New Caledonia before Confederation.

**Prerequisite:** HIST 101 or 102 or 103 or 104 (3,0)

**HIST 211 Local History 3 CR**

An introduction to the north central interior of British Columbia. Topics include native-white relations resource development and settlement patterns. Particular emphasis is placed on historical methodology and research. (3,0)

**HIST 213 Foundations of Nineteenth Century European Intellectual History 3 CR**

A survey of key contributors to the Western intellectual tradition from the ancient Greeks and Hebrews, through Aquinas, Rousseau, and Adam Smith, to Marx and Darwin. Students are encouraged to complete a course in history or philosophy before taking History 213. (3,0)

**HIST 214 Late Nineteenth and Early Twentieth Century European Intellectual History 3 CR**

A sequel to History 213, covering the development of the modern Western intellectual tradition from Nietzsche, Freud, and Pareto, through logical positivism and existentialism, to feminism and deconstructionism. Students taking this course would benefit from a background in history, philosophy, or literature. (3,0)

**HUM 101 Humanities I 9 CR**

Humanities 101 and 102 provide a non-disciplinary programme of liberal education based on a reading list of great works of literature, philosophy and history. The program is designed to provide the first-year student with comprehensive practice in reading significant works intelligently and in thinking, talking and writing about those works clearly and critically. Considerable emphasis is placed on essay writing; five major essays per semester are required. The programme involves considerable instruction and criticism in how to write effective academic essays at the college level.

**Prerequisite:** Permission of the instructors. (9,3)

**HUM 102 Humanities II 9 CR**

A continuation of Humanities 101.

**Prerequisite:** Humanities 101 or permission of the instructors. (9,3)

**MATH 100 Precalculus Mathematics 3 CR**

This course is designed to prepare students for the introductory calculus sequence. It is intended primarily for those students whose mathematical background needs strengthening, i.e. students who do not have an 'A' or 'B' grade in Math12 or who have been unsuccessful in passing the Calculus Readiness Test administered by the College or who have not studied any mathematics during the past few years.

The topics covered in the course are: a review of real numbers and algebra, solving equations and inequalities, graphing and an introduction to functions, linear and quadratic functions, polynomial and rational functions, exponential and logarithmic functions and an introduction to trigonometry.

**Prerequisite:** MATH 11 or MATH 045 (4,0)

**MATH 101 Calculus I 3 CR**

This course is the first half of a two-semester introductory calculus sequence. The topics covered in the course are: the concepts, techniques, and applications of differentiation and an introduction to integration. Together with Math 102 this course satisfies the first year mathematics requirement in all university transfer science and applied science programmes.

**Prerequisite:** MATH 12 or MATH 100 or MATH 050(4,0)

*Note: Persons with a 'C+' grade or less in Math 12 or Math 050 must take the CNC Calculus Readiness Test to confirm placement in this course. In addition, those students who have been out of school for two or more years should take the test.*

**MATH 102 Calculus II 3 CR**

This course is a continuation of Math 101 and forms the second half of the two-semester introductory calculus sequence. The topics covered in the course are: the definite integral, applications of integration, logarithmic and exponential functions, trigonometric and inverse trigonometric functions, hyperbolic functions, techniques of integration, and infinite sequences and series. Together with Math 101 this course satisfies the first year mathematics requirement in all university science and applied science programmes.

**Prerequisite:** MATH 101 (4,0)

**MATH 103 Finite Mathematics 3 CR**

Math 103 is intended primarily for Liberal Arts and Education students who want some exposure to modern mathematical concepts. Topics will be chosen at the discretion of the instructor and may include such areas as: logic, set theory, algebraic systems, combinatorics, probability, elementary number theory, matrices, linear programming, dynamic programming, game theory and network analysis.

**Prerequisite:** MATH 11 or MATH 045 (3,0)

**MATH 104 Introduction to Statistics 3 CR**

This course is designed to provide a basic knowledge of statistical methodology. Topics include descriptive statistics, elementary probability theory, probability distributions, sampling and some standard concepts and techniques of statistical inference, correlation and linear regression.

Applications to a wide variety of problems are emphasized. **Prerequisite:** MATH 11 or MATH 045 (3,0)

**MATH 105 Introductory Programming with Statistics** 3 CR  
 This course is a continuation of Math 104, and is intended for students who are planning to study Forestry at UBC. In addition to the more advanced topics in statistics, the programming language FORTRAN is taught. The students will write their own programs and also use a library of programs in order to solve problems.  
**Prerequisite:** MATH 104 (3,3)

**MATH 190 Principles of Mathematics For Teachers** 4 CR  
 This course is designed for students specializing in elementary level education. Topics include: natural, integer, and rational number systems; plane, solid, metric, and motion geometries. (4,0)

**MATH 201 Calculus III** 3 CR  
 Vectors in two and three dimensions, vector functions and their derivatives, functions of several variables, partial differentiation, the gradient, chain rule, implicit functions, and extremal problems including Lagrange Multipliers and the second derivative test.  
**Prerequisite:** MATH 102 (3,0)

**MATH 202 Calculus IV** 3 CR  
 Multiple integrals, vector fields, line and surface integrals, Green's Theorem, Stoke's Theorem, Gauss' Theorem, complex numbers and functions, and an introduction to differential equations.  
**Prerequisite:** MATH 201 (3,0)

**MATH 203 Introduction to Analysis** 3 CR  
 A course in theoretical calculus for students intending to major in mathematics or computing science. This course may also be of interest to students continuing in other areas that require additional mathematics. Topics include logic and proof, topology of the real numbers, sequences, limits and continuity, differentiation, integration, infinite series, and uniform convergence.  
**Prerequisite:** MATH 102 (3,0)

**MATH 204 Linear Algebra** 3 CR  
 Systems of linear equations, matrices, determinants, geometry of 2-space and 3-space, vector spaces, linear transformations, eigenvalues, applications.  
**Prerequisite:** MATH 102 (3,0)

**MATH 205 Probability and Statistics** 3 CR  
 The Laws of Probability; discrete and continuous random variables; expectations; joint distributions; Central Limit Theorem; estimation; and an introduction to hypothesis testing.  
**Prerequisite:** MATH 101  
**Prerequisite or Corequisite:** MATH 102 (3,0)

**MATH 215 Differential Equations I** 3 CR  
 A first course in differential equations for students going on in mathematics, engineering or other subjects requiring additional mathematics. Topics include: first order ordinary differential equations, second order linear equations, nth order linear equations, series solutions of second order linear equations, the Laplace transform, systems of first order linear

equations, applications to growth and decay, epidemics, population dynamics, compartmental analysis, curves of pursuit, mechanical and electrical vibrations.

**Prerequisite:** MATH 102

**Prerequisite or Corequisite:** MATH 204 (3,0)

**PAC**

The following Physical Activity Courses (PAC) provide students the opportunity to acquire concept knowledge and motor skills to complete the Performance Competency requirements.

- |                    |                    |
|--------------------|--------------------|
| PAC 101 Basketball | PAC 106 Golf       |
| PAC 102 Volleyball | PAC 107 Gymnastics |
| PAC 103 Soccer     | PAC 108 Badminton  |
| PAC 104 X-C Skiing | PAC 109 Raquetball |
| PAC 105 Curling    | PAC 110 Tennis     |
| PAC 111 Aquatics   |                    |

**PE 100 National Coaching Certificate Programme Level I**

This course is designed to teach you how to introduce skills, to organize training lessons and to design a safe, positive, supportive, and challenging sport environment for beginning athletes. Students will develop a Practice Planning Instrument.

**PE 120 Biomechanical Analysis of Sport and Dance Performance** 3 CR

This course introduces the student to biomechanic analysis of movement patterns in sport and dance. (3,0)

**PE 121 An Introduction to the Study of Sport** 3 CR

An introductory examination of leisure and sport from the perspectives of the humanities and social sciences. Emphasis is placed on the definition of basic concepts and on different theories which purport to explain the nature and role of leisure and sport in society. (3,0)

**PE 122 Conditioning for Sport and Physical Activity** 3 CR

An analysis of the practical and theoretical concepts of athletic conditioning used in the development of general and specified training programmes for games and sports will be the prime focus of this course. (3,0)

**PE 123 Biodynamics of Physical Activity** 3 CR

An introductory examination of the mechanical, anatomical, and physiological bases of human physical performance. This course provides a fundamental understanding of how the physical laws of nature govern human movement observed in athletic skills. (3,0)

**PE 124 Dynamics of Motor Skill Acquisition** 3 CR

An introduction to motor skill acquisition and performance including the important related topics of: 1) growth, 2) motor development, and 3) psychological concerns. Basic principles and concepts that provide a foundation for more advanced study

in each of the three topic areas; emphasis on the complexity and inter-relationship of these topics in the acquisition and performance of motor skills. (3,0)

**PE 125 Dance Forms 3 CR**  
The theory and practice of dance as a human physical activity. Focus will be on the aesthetic, expressive, rhythmical dimensions of movement in a culture's artistic and social life. The course will include movement content, techniques, improvisation, and composition in a variety of dance forms. (3,0)

**PE 200 National Coaching Certificate Programme Level II**  
This course is designed to help you to introduce athletes to training for competition. Students will develop a Seasonal Planning Instrument.  
**Prerequisite:** PE 100

**PE 220 Analyzing Performance in Team Sports 3 CR**  
Utilizing selected team sports as models, this course examines the role of analysis in contributing to effective team sport performances. (3,0)

**PE 221 Physical Growth and Motor Development 3 CR**  
Characteristics of physical growth and motor development and their interrelationships to physical activity. Topics include maturation, factors affecting physical growth and motor development, and long-term development programs.  
**Prerequisite:** PE 124 or instructor's permission (3,0)

**PE 222 Sport in Canadian Society 3 CR**  
Historical and contemporary perspectives of Canadian sport: Canadian sport systems; historical, geographical, sociological factors that have shaped Canadian sport; role of sport in Canadian society; sport ideologies.  
**Prerequisite:** PE 121 (3,0)

**PE 223 Human Functional Anatomy 3 CR**  
This course examines the structural anatomy of the human skeletal and articular muscular systems. The relationship between structure and human movement is also examined.  
**Prerequisite:** PE 123 (4,0)

**PE 224 Human Applied Physiology 3 CR**  
This course examines the functional characteristics of human systems. A homeostatic approach to selected systems facilitates an understanding of how exercise affects the human physiological condition.  
**Prerequisite:** PE 123 (4,0)

**PE 300 National Coaching Certificate Programme Level III**  
Level III theory integrates material covered in Levels I and II with new information aimed at "completing the coach" of developing athletes. Level III culminates in the Yearly Planning Instrument. The primary goal of Level III is learning to plan for a year of training and competition.  
**Prerequisite:** PE 200

**PHIL 101 Moral Philosophy 3 CR**  
An inquiry into the nature and justification of moral stan-

dards. No conduct is legal or illegal apart from our making it so. Is any conduct morally right or wrong apart from our thinking it so? Is there a correct method of distinguishing right from wrong? Must morality be based on religion? Why should happiness rather than virtue be thought to be the highest good? Can an action be morally wrong even if it harms no one? (3,0)

**PHIL 102 Theory of Knowledge 3 CR**  
An examination of skeptical doubts concerning the possibility of knowledge. What distinguishes knowledge from opinion? Does evidence have to convince everyone before it constitutes proof? Does what is true depend on what people regard as true? Can perception show us how the world really is or merely how it appears to creatures like us? Should we believe only what there is sufficient evidence to support? How is faith related to knowledge and belief? (3,0)

**PHIL 103 Critical Thinking 3 CR**  
A study of the criteria of sound reasoning. This course undertakes to establish some elementary criteria for assessing the validity of deductive arguments and the strength of inductive arguments. (3 CR)

**PHIL 104 Critical Thinking II 3 CR**  
This course is a sequel to PHIL 103 and will be conducted as a seminar devoted to the discussion of assigned readings. At the end of a series of seminars on the work of a author or a group of authors there will be a short written assignment giving students an opportunity to formulate and express carefully their understanding of the issues raised. While making their acquaintance with some important ideas in modern western thought, students will develop their abilities to read, write and speak, and to uncover the meaning and structure of arguments in a variety of genres and subjects.

**PHIL 205 Philosophy of Science 3 CR**  
An examination of philosophical issues concerning the nature of scientific theories and explanations. How is theory to be distinguished from observation? How can theories be tested by confrontation with observed facts if what we are willing to court as a fact depends in part on the theories we already hold? Can we be immediately aware of more than our own present sensory experiences? Does every event have a cause? Do we have reason to think that any event has a cause? Are scientific and supernatural explanations incompatible? (3,0)

**PHIL 220 Political Philosophy 3 CR**  
An introduction to political philosophy. Of central concern will be an examination of attempt to provide a basis for political obligation and to justify civil disobedience and revolution. Why should the legitimacy of government have to rest on the consent of the governed? Do we have a moral obligation to obey even unjust laws until we can convince the majority to change them? What if we try our best to convince them but fail? Do citizens have 'natural' rights which the state might refuse to recognize and therefore fail to protect? (3,0)

**PHIL 221 Social Philosophy 3 CR**  
An investigation into the social ideals of liberty, equality, and justice. What sort of equality is compatible with liberty and

required by justice? Why should all opinions be allowed equal opportunity for expression in a free market of ideas? Is it likely that true and intelligent ideas will triumph over false and stupid ideas in open competition? Is capitalism just as much a system of exploitation as slavery or feudalism? (3,0)

**PHIL 230 Introduction to Philosophy of Education 3 CR**

An introduction to philosophical issues concerning education. No previous acquaintance is presumed. We will begin by examining the question "What is an educated person?" Is education concerned only with knowledge and skills or also with attitudes and ambitions? What distinguishes education from indoctrination or socialization? (3,0)

**PHYS 101 Introductory Physics I 3 CR**

This is a calculus-based physics course for science majors. Topics covered include two-dimensional vectors, kinematics, dynamics, energy and momentum of particles, equilibrium of rigid bodies, rotational motion and simple harmonic motion. Differentiation and integration of one and two dimensional motion equations is included. Cross products and dot products will be introduced.

**Prerequisites:** Physics 12 or PHYS 045 and MATH 12 or MATH 050 or 100

**Prerequisite or Corequisite:** MATH 101 (3,3)

**PHYS 102 Introductory Physics II 3 CR**

A sequential course to PHYS 101. Topics covered are electric charges, electric fields, electric currents, electrical circuits, magnetic fields, electromagnetism, light, atomic physics and nuclear reactions.

**Prerequisites:** PHYS 101, MATH 101

**Prerequisite or Corequisite:** MATH 102 (3,3)

**PHYS 105 General Physics I 3 CR**

A general, algebra-based physics course, intended for those not majoring in the physical sciences. Topics covered are kinematics, circular motion, dynamics, equilibrium, momentum, energy, fluids, temperature and heat.

**Prerequisites:** Physics 11 or PHYS 045 and MATH 11 or MATH 045 (3,3)

**PHYS 106 General Physics II 3 CR**

This course, along with PHYS 105, will satisfy the physics requirement for those whose major programme areas require a year of university-level physics. Topics include electric charges, electric fields, magnetic fields, electric currents, electrical circuits, light atomic physics and nuclear reactions.

**Prerequisites:** Physics 11 or PHYS 045 and MATH 11 or MATH 045 (3,3)

**PHYS 201 Thermodynamics 3 CR**

A first course in thermodynamics for students going on in chemistry, physics, and engineering. Topics include temperature, heat and work, heat transfer, molecular properties, ideal and real gases, heat engine cycles, evaporation and refrigeration, entropy and the Second Law.

**Prerequisites:** PHYS 101 or 105, MATH 102

**Prerequisite or Corequisite:** MATH 201 (3,3)

**PHYS 202 Electricity and Magnetism 3 CR**

Topics include electrostatic charges, the electric field, Gauss' Law, the electric potential, capacitance, current and resistance, electric circuits, A.C. circuits, the magnetic field, Ampere's Law, Faradays' Law. A series of experiments designed to demonstrate the concepts of electricity and magnetism and modern physics are included.

**Prerequisite:** PHYS 106 or PHYS 102

**Prerequisite or Corequisite:** MATH 202 (3,3)

**PHYS 204 Mechanics I - Statics 3 CR**

A first course for students in engineering and the physical sciences. Topics include vectors (two and three dimensions, dot products, cross products, and triple products), statics of particles and rigid bodies, laws of dry friction and kinematics and kinetics of particles.

**Prerequisites:** PHYS 102 or 106, MATH 102

**Prerequisite or Corequisite:** MATH 201 and 204 (3,0)

**PHYS 205 Mechanics II - Dynamics 3 CR**

A continuation of Physics 204. Topics include systems of particles, kinematics and dynamics of rigid bodies, centroids and moments of inertia, and mechanical vibrations (optional)

**Prerequisite:** PHYS 204

**Prerequisite or Corequisite:** MATH 202 (3,0)

**PSCI 131 The Administration of Justice 3 CR**

This introductory course is concerned with the major issues associated with the administration of justice in Canada. It will examine such issues as civil liberties and effective law enforcement, social and political justice, and national integrity. The purpose of the course is to provide students with an understanding of the dynamic processes of change in the administration of justice. Significant tensions exist between the ideals of justice and the realities of politics. This fact will become apparent as we examine political changes and the emergence of new problems to which laws and structures must constantly respond.

**Prerequisites:** CRIM 103 or permission of the instructor. (3,0)

**PSYC 101 Introduction to Psychology 3 CR**

This general survey course includes topics such as a brief history of psychology, elementary experimental design, the nervous system, sensation, perception, learning, memory, language, and thought. (3,0)

**PSYC 102 Introduction to Psychology II 3 CR**

A continuation of PSYC 101. Topics will include intelligence and intelligence testing, personality assessment, motivation, emotion, mental health and behavioural disorder, psychotherapy, social psychology and development psychology.

**Prerequisite:** PSYC 101-minimum 'P' grade (3,0)

**PSYC 103 Human Sexuality 3 CR**

This course is designed to provide a basic understanding of human sexuality from a biological, psychological, and social perspective. Topics will include such items as anatomy, physiology and sexual responses, psychosexual development, sexual behaviour and sexual complications. (3,0)

**PSYC 201 Statistics for the Social Sciences 3 CR**

This course covers the basic principles of descriptive and inferential statistics and their application to research in the social sciences. Experience will also be gained on the use of computer programs for data analysis. Highly recommended for majors in the social sciences.

**Prerequisite:** MATH 11 or MATH 045 (3,3)

**PSYC 202 Experimental Psychology 3 CR**

This course introduces experimental methods as applied to research in psychology. It provides the student with direct experience in research design, data collection and analysis, as well as in the written presentation of research findings.

Although the experimental approach is the main focus, consideration is also given to other methods.

**Prerequisites:** PSYC 101 and 201- minimum 'P' grades(3,3)

**PSYC 203 Introduction to Personality 3 CR**

The student is introduced to the field of personality through the examination of several theories of personality (ie: Psychoanalysis, Trait Theory, Rogerian Self Theory, Behavioural Theories). These theories, as well as assessment procedures related to these theories, are evaluated in terms of their scientific adequacy.

**Prerequisites:** PSYC 101 and 102-minimum 'P' grades(3,0)

**PSYC 204 Social Psychology 3 CR**

The study of human behaviour and adjustment within interpersonal and social situations. Some of the topics include: affiliation, liking and loving, attitude and attitude change, prejudice, conformity and compliance, aggression, altruism (helping behaviour), group structure and dynamics. The approach will be to cover major social psychological theories and research methodology as they relate to these topics.

**Prerequisites:** PSYC 101 and 102 - minimum 'P' grades

**PSYC 205 Developmental Psychology I 3 CR**

The psychological development of the human being from conception through childhood. Includes the cognitive, psychomotor, social and emotional aspects for development.

**Prerequisites:** PSYC 101 and 102 - minimum 'P' grades(3,0)

**PSYC 206 Developmental Psychology II 3 CR**

The psychological development of the human being from puberty through old age. Includes the physical, cognitive, personality, social and emotional aspects of development.

**Prerequisites:** PSYC 101, PSYC 102 - minimum 'P' grade (3,0)

**PSYC 207 Psychopathology 3 CR**

This course examines a wide variety of models of psychopathology, (ie. medical, psychodynamic, behavioural). The causes and treatments of several disorders (ie. anxiety disorders, somatoform disorders, schizophrenia, affective disorders, psychopathy, alcoholism) will be examined from the perspective of each model.

**Prerequisites:** PSYC 101 and 102 - minimum 'P' grade(3,0)

**PSYC 209 Introduction to Biological Psychology 3 CR**

This course introduces students to the relationship between brain function and behaviour in both humans and non-

humans. Topics include behavioural genetics, neural structure, function and organization, neural anatomy, sensory and motor systems, higher cognitive processes such as learning, memory and language.

**Prerequisite:** PSYC 101

**Corequisite:** PSYC 102 (3,0)

**SCIENCE 101 0 CR**

A mandatory non-credit course for SCIENCE ONE students. The course will consist of a series of one-hour seminars on science and engineering related topics including career information. (1,0)

**SCIENCE 102 0 CR**

A continuation of Science 101. A mandatory course for SCIENCE ONE students. The course will continue the series of one-hour seminars on science and engineering related topics including career information. (1,0)

**SOC 101 Introduction to Sociology I 3 CR**

An introduction to the basic Sociological theories and methods for studying individuals, groups, and institutions. Topics described and explained will include culture, socialization, families, education, gender, aging, and deviance. These concerns will be illustrated and developed with Canadian materials. (3,0)

**SOC 102 Introduction to Sociology II 3 CR**

A continuation of SOC 101. Topics described and explained will include the characteristics and changes in the general population, local communities, ethnic groups, social movements, political parties, work settings and religious organizations. These concerns will be illustrated and developed with Canadian materials.

**Prerequisite:** SOC 101 - minimum 'P' grade (3,0)

**SOC 201 Sociology of Work - General 3 CR**

The development of white collar and professional work as a product of the agriculture and industrial revolutions. The relationship between white collar and professional work in the business, service, technical, educational, medical, legal, and social welfare fields. The organization, goals and influence of unions and professional associations. The importance of qualifications, gender and class in determining the power of an occupation. The connections between work and leisure.

**Prerequisites:** SOC 101 and 102 (3,0)

**SOC 202 Sociology of Work - Industry 3 CR**

The organization of manufacturing and resource industries. The characteristics and relationships of industrial workers. The development, structure and influence of labour and trade unions. The connection between crafts, trades and "unskilled" labour. The importance of gender, class, ethnicity and technology in industrial work. The problem of unemployment. The structure of one-industry towns.

**Prerequisites:** SOC 101 and 102 (3,0)

**SOC 203 Canadian Society I: Identities and Ideologies 3 CR**

An examination of the structural, cultural and regional variations in the development of social identities and political ideologies in Canada. An evaluation of the traditional ideologies of Liberals,



Conservatives and Socialists in Canada. An exploration of the modern political approaches of the Social Democrats and Neo-Conservatives. A study of the conditions under which radical fringe political parties emerge and decline. An analysis of how the various Canadian identities are tied to the political ideologies.

**Prerequisites:** SOC 101 and 102 (3,0)

**SOC 204 Canadian Society II:  
Race and Ethnic Relations 3 CR**

An examination of the social organization of race and ethnic relations in Canada. The causes and consequences of the changing pattern of immigration. Descriptions of the major ethnic groups and communities. The development of the ideology, policy and practice of multiculturalism. The survival and decline of ethnic identities. An examination of problems of private prejudice and the practice of institutional racism. The culture and behaviour of natives in Canada. An analysis of the land claims issue in Canada.

**Prerequisites:** SOC 101 and 102 (3,0)

**SOC 206 Social Problems 3 CR**

A sociological study of the creation, causes and consequences of contemporary social problems in Canadian society. Topics described and explained will include organized crime, corporate crime, juvenile delinquency, sexual harassment, rape, AIDS, mental illness, alcoholism, and drug abuse. Factual and moral arguments concerning these and other social problems will be evaluated.

**Prerequisite:** SOC 101 or CRIM 101 or instructor's  
**Prerequisites:** permission (3,0)

**SOC 220 Women In Society 3 CR**

This course aims at a critical examination of the historical and contemporary position of women in various societies, with particular emphasis on Canada. Traditional sociological theories and a number of feminist perspectives will be used to analyze gender inequality, the institutionalized means through which it is reproduced, and the possibilities for meaningful change in Canada.

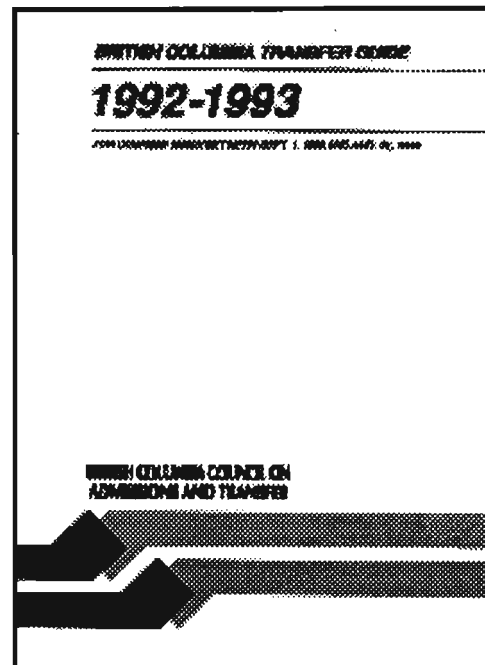
**Prerequisite:** SOC 101 (3,0)

## UNIVERSITY TRANSFER GUIDE

Students planning to transfer their credits to another institution should consult the British Columbia Transfer Guide to verify transferability of credits.

The British Columbia Transfer guide is published by the British Columbia Council on Admissions and Transfer and is available in the CNC Counseling Centre and Library.

CNC Counsellors will assist students in selecting transferable courses; however, the final responsibility for course selection rests with the student.



# A

## ADMINISTRATION AND FACULTY

### ADMINISTRATION and FACULTY

- AAQUIST, Orla, B.Sc., B.Ed., M.Sc., Ph.D.  
Physics
- AITKEN, Daniel, B.Sc.  
Biology
- ALEXANDER, C. Marie, C.H.R.P.  
Manager, Human Resources
- ALLGAIER, Hans, B.A., M.A.  
English
- AMES, Gregory, D.D.S., F.A.G.D.  
Dental Studies
- ANDREW, Christine, R.N., B.N., M.Ed., M.Ed.  
Nursing
- ANSETH, Dave, T.Q. & I.P.Auto, Alta.T.Q.Auto  
Automotive Mechanics
- APPLEGATE, Mary, R.N., B.Sc.N., M.N.  
Nursing
- ASHURST, Cathy  
Regional Manager, Lakes District
- BACKHOUSE, John., A.L.A.  
\*\* On leave
- BACKMAN, Louise, C.D.A.  
Dental Studies
- BALL, Robert, B.Sc., M.Sc.  
Physics
- BARCLAY, Donald, R.N., B.A.  
Nursing
- BAXTER, Eunice, M.B.A., Ph.D.,  
Marketing/Management
- BERRY, Stuart, Diploma, Telecom. & Electronics  
Manager, Instructional Media Services
- BHATTASALI, Sonali, B.A.  
Office Administration
- BIECH, TED, B.Sc.(Hons.), M.Sc., Ph.D.,  
Mathematics
- BIRCHER, Rudy, I.D., 1st Class, P.E. J.I.I.M.  
Power Engineering
- BLAIR, Campbell, T.Q. & I.P.Millwright,  
T.Q.Machinist  
Millwright/Machinist
- BLAKE, JIM, B.Comm, M.B.A., C.A.  
Vice President, Administration and Bursar
- BOESE, Barbara, B.A. (Hons.)  
Employee Relations Assistant
- BORSATO, Karen  
Regional Manager, Quesnel
- BROWN, Heather, C.D.A.  
Dental Studies
- BUCK, Nicholas, B.Sc., M.Sc.  
Mathematics
- BYATT, Wendy  
Executive Secretary to the President
- CHULKA, Sandra, B.H.E., M.L.S.  
Librarian
- CHUNG, Stan, B.A. (Hons.), M.A. B.C.Teaching Cert.  
English
- CHUTE, Lisa, B.Nurs., M.Public Administration  
Nursing
- CIOE, Jan, B.A. (Hons.) M.A., Ph.D., M.Phil.  
Psychology\*\* On leave
- COLDWELL, Lana, B.S.W., Reality Therapy Cert.  
Social Services
- CONNORS, Joan, B.Sc. (Hons.), M.A.  
Adult Basic Education
- CONROY, Kathleen, B.A., M.A., M.S.W.  
Counsellor
- COTTON, Fran, R.D.H., B.Sc.D., M.Ed.  
Divisional Chair, Dental Studies
- COVINGTON, Patricia, R.D.H., B.Sc.  
Dental Studies
- CRAMPTON, Dorinda, B.A., I.D.  
Adult Basic Education
- CROKEN, Miyoko, R.N., B.A., I.D., Nsg.Unit  
Admin. Dip.  
Nursing
- CROW, John, B.Sc., Ph.D.  
Chemistry
- DAVISON, George, B.A.(Hons.), M.A., Ph.D.  
History
- DEUTCH, William, T.Q. & I.P., Auto, I.D.  
Automotive Mechanics
- DOBROWOLSKI, Edward, B.Sc., M.Sc., Ph.D.  
Mathematics
- DRAGUSICA, Mellhina, B.A.  
Adult Special Education
- DUMAS, Al, B.Sc. Eng., P.Eng.  
Engineering Graphics & Design
- ELLINGTON, Larry, T.Q.Auto, T.Q. HDM  
Heavy Duty Mechanics
- ELLIOT, Pirie, A.Sc.T., R.P.F., I.D.  
Forestry
- ENGLISH, John, B.A.Sc., P.Eng.  
Electronics Engineering Technology
- FAHLMAN, Penny, B.A., CMA  
Manager, Finance & Administration
- FARR, Bill, I.D., B.Comm., L.L.B.  
Law/Economics
- FLECK, David, C.F.C.C. Cert. Journeyman  
Cook Training
- FORTIN, Cy, I.D., I.P., Welding Insp. Level III,  
C.Tech.  
Welding

## ADMINISTRATION AND FACULTY

---

FOWLER, Sylvia

Executive Secretary to the Vice President,  
Administration, Bursar & Board Secretary

FRIEDRICH, Kori, R.N., B.S.N.

Nursing

GARTEIG, Laureen, R.N., B.Sc.N.

Nursing

GATTRELL, Janice, B.A., M.L.S., B.C. Teaching Cert.

Adult Basic Education\*\* On leave

GOODE, Robert, A.S.T.

Manager, Building Services

GRABER, Jo, B.Sc.

Divisional Chair, Technologies

GRAF, Susan, R.N.

Nursing

GRAHAM, William, B.A.

Adult Basic Education

GREEN, Rowland, B.Comm., C.A., A.C.I.S.

Accounting & Finance

GRIFFITH, Eric

Director, Enterprise Development Centre

GRUNTMAN, Dale, B.Comm.

Registrar

HAINES, Judith, R.N., B.Sc.N.

Nursing

HALL, David, C.A.(Cda), C.A.(S.A.), C.A.(Zim)

Controller

HAMEL, Lorne, T.Q.Auto, T.Q. & I.P.HDM, T.Q.

Comm. Trans.

Heavy Duty Mechanics

HARRIS, Bob, B.A., B.Ed., M.Ed, B.C. Teaching  
Cert.

Counsellor

HARRIS, John, B.A., M.A., Ph.D.

English

HARTMAN, Wanda

Regional Manager, Mackenzie

HEALEY-OGDEN, Marion, R.N., B.S.N., M.A.

Nursing

HEDEKAR, Tommy, Tech. Dipl., A.Sc.T., R.P.F., I.D.

Forestry

HEINZ, Wayne

Computer Information Systems

HEINZMANN, Gloria, R.N., I.D.

Long Term Care Aide, Home Support Worker

HIGHAM, Philip, B.Sc.(Hons.), Ph.D.

Psychology

HINES, Dougal, M.R.C., I.D.

Adult Special Education

HOFMEIER, Elizabeth, B.Sc., B.C. Teaching Cert.

Adult Basic Education

HOLM, David, B.A.(Hons.), M.P.A., M.A., Ph.D.

History

HOPE, Lise

Personnel Services Assistant

HOYER, Jim

Manager, Evening Campus Operations

HUNTER, Blaine

Computer Information Systems

HUNTER, Susan, B.A., Ont. Teaching Cert.

Management

IBBERSON, John, B.A. (Hons.), M.A., D.Phil.

Philosophy

IDIENS, Alan, B.Com., M.B.A., I.D.

Commerce/Economics

INGALLS, Gordon, B.A. (Hons.), M.A.

Divisional Chair, U.T. Arts

INSLEY, Robin, B.Sc., M.Sc.

Mathematics\*\* On leave

JACQUES, Lynn

Office Administration

JAROSCH, Conrad, B.S.A., M.Sc., R.P.Bio

Biology

JENSEN, Jim, I.D., I.P., 1st Class Electrical

Electrical

JENSEN, John, T.Q. & I.P., Alta. Auto, T.Q., I.D.

Automotive Mechanics

JOHNSON, Judith, B.Sc., M.Sc.

Biology

KANE, Greg, B.A. (Hons.), I.D., Techn. Dipl.,

B.M.Cert.

Computer Information Systems

KAWEESI, George, B.Sc. (Hons.), M.Sc.

Computer Science

KOSOWICK, Terry, B.B.A., C.G.A.

Accounting & Finance

KRUSHELNICKI, Earl, B.Ed.

Adult Special Education

LINDSAY, Andrea, R.N.

Nursing

LO, Raymond, B.Sc. (Hons.), Ph.D., R.P.Bio

Biology

LOERKE, Bruce, B.A.

Geography

LYNCH, Nancy, R.N., B.Sc.N.

Nursing

MACNEIL, Debbie, B.A., E.C.E. Certificate

Early Childhood Education

MADILL, Marleen

Manager, College Store

MAGEE, Anne, Teaching Diploma

D.S.C.

MAIDA, Ralph, B.A., M.Sc., Ph.D., B.C. Teaching

Cert.

Counsellor

- MALCOLM, Ben, B.Sc., M.Sc.  
Chemistry
- MALCOLM, Judith, B.Sc.  
Mathematics
- MARTIN, Robert  
Divisional Chair, Trades
- MAY, Jean, R.N., I.D.  
Long Term Care Aide, Home Support Worker
- MCCOMB-TARDIF, Tina, B.H.K., M.H.K., B.Ed.  
Physical Education
- MCDONALD, Tim, B.Sc. (Distinction), M.A.  
Psychology
- MCFETRIDGE, Susan  
Adult Special Education
- MCGILLIVRAY, Judith, R.N., B.S.N., M.N.  
Divisional Chair, Nursing
- MCKINNON, Barry, B.A., M.A.  
English
- MCLEOD, Angus, B.Sc., M.Sc., R.P.F., P.Ag.  
Forestry
- MCPHERSON, Ralph, C.M.A.  
Accounting & Finance
- MCQUAID, Ann, B.A., M.A., M.Ed.,  
Adult Basic Education
- MCVEY, Alistair, M.A. (Hons.), M.A.  
Divisional Chair, U. T. Sciences
- MILLER, Fran, B.A., B.Ed.  
Adult Special Education
- MILLER, Robert, B.Sc.  
Divisional Chair, Business
- MINGAY, Maurice, I.D., T.Q. & I.P., Electrical Work  
Electrical
- MITCHELL, Marcia, I.D.  
Office Administration/Adult Basic Education
- MORGAN, John, B.A. Sc., P.Eng.  
Engineering Graphics & Design
- MORRICE, Edward, B.Sc., R.P.F.  
Forestry
- MORRISON, Donald, T.Q., P.W.P., I.D.  
Welding
- MUNK, Lindy, B.A., M.A. (Educ.)  
Psychology
- MUNRO, Cris, Diploma, Mktng, Management  
Manager, Purchasing
- MURGULY, George, B.A.Sc., P.Eng.  
Engineering Graphics & Design
- MURTHY, Sim, B.Sc. (Hons.).D.I.I.Sc. (E.T.), M.Eng.,  
P.Eng.  
Electronics Engineering Technology
- NELSON, Robert, B.Sc.(Hons.), M.Sc., Ph.D.  
Physics and Astronomy
- NI, Shudao, B.Sc., M.Sc.,  
Forestry
- NOBLE, Patricia, R.D.H., B.Sc., M.Ed.  
Dental Studies
- NORTHEY, Bruce, B.A., M.S.W., R.S.W.  
Anthropology/Sociology
- NUTTALL, Ruth, B.A., P.D.A.D.(Educ.),  
Alta.Teaching Cert.  
Early Childhood Education
- OLLECH, Sandra, R.N., B.S.N.  
Nursing
- PAGE, Deborah,  
Adult Basic Education
- PARKE, John, B.Comm., C.A.  
Accounting & Finance
- PARKER, Ken, B.A., M.A.  
Criminology
- PEACOCK, Eric, C.Tech., I.D.  
Engineering Graphics & Design
- PENNER, Maureen, R.D.H., B.Sc.D.  
Dental Studies
- PETERS, John, T.Q. & I.P., Carpentry  
Carpentry
- PETRIW, Borden, R.N., B.N.  
Nursing
- PITT, Vicki, B.Sc.(Hons.)  
Adult Basic Education
- PLETT, Katherine, B.A., M.L.Sc.  
Associate Director, College Resource Centres
- PRECOSKY, Don, B.A., M.A., Ph.D.  
English
- RAINSFORTH, Sherry, B.Ed., M.Ed., Ph.D.  
Vice President, Academic
- RAMAGE, Maggie, B. A. (Hons.), B. C. Teaching  
Cert.  
Career Skills/Co-operative Education
- RAMSEY, Hazel, B.Sc., M.A.  
Adult Basic Education
- RAMSEY, Paul, B.A., M.A.  
English
- RAPHAEL, Clifford, B.A. (Hons.), M.Sc.  
Geography
- REA, Bill, B.A. (Hons.), M.A.  
Criminology
- REID, Michael, B.A. (Hons.), M.A.  
Economics
- RITCH, Elizabeth, B.Sc., M.Ed., M.Sc.,  
Adult Basic Education
- ROBERTS, Pat, B.P.E., M.Ed., B.C.Teaching Cert.  
Counsellor
- ROBERTSON, Barbara, B.Sc., M.A.  
Psychology
- ROBERTSON, Mary Ann, I.D., B.C.Teaching Cert.  
Adult Basic Education

## ADMINISTRATION AND FACULTY

---

- ROBINSON, Peter, B.Comm., M.B.A.  
Associate Director, Employment Training
- ROBINSON, Sandra, R.N., B.Sc.N.  
Nursing
- ROY, Angela, B.A., Ont. Teaching Cert.  
Office Administration
- RUFFLE, Kathryn, B.A., M.L.S.  
Head, Reference Services;  
College Resource Centres
- RYAN, Ron, B.Comm.  
Marketing/Management
- SCHLUETER, Claus, C.Tech., I.D.  
Electronics Engineering Technology
- SCULLEY, Azizah, R.N., B.Sc.N.  
Nursing
- SEENS, Paul, B.A., M.A., M.L.Sc.  
Director, Planning & Student Services
- SHAFFER, Stan, B.A. (Hons.), M.A.  
English
- SHARUGA, Constance, R.D.H., Ph.D.  
Dental Studies
- SHELLEY, Stephen  
Manager, Computer Services
- SOMERO, Jenny  
Executive Secretary to the Vice President,  
Academic
- SHILOFF, Deborah, B.Sc., M.Sc., M.S., Ph.D.  
Chemistry
- SIDSWORTH, Chris, B.A., M.A.  
English
- SINNOTT, Marie, B.A., C.M.A., I.D.  
Accounting & Finance
- SLUYTER, William, T.Q. & I.P., Carpentry, I.D.  
Carpentry
- STEARNS, Dave, B.Sc.F., R.P.F.  
Forestry
- STOREY, Patrick, B.A., B.S.W., M.S.W.  
Divisional Chair, Human Services Programs
- SUWALA, Halina, M.Ed., B.C.Teaching Cert.  
Adult Special Education
- SYMMES, Nancy, R.N., B.S.N.  
Nursing
- TARRANT, Nancy, C.D.A.  
Dental Studies
- TAYLOR, Robin, T.Q. Millwright  
Millwright/Machinist
- TAYLOR, Walter, T.Q. & I.P.HDM, T.Q. & I.P.Auto,  
T.Q. & I.P. Comm. Transport  
Heavy Duty Mechanics
- THAIR, Brian, B.A., M.A., Ph.D.  
Biology
- TIERNEY, Mary Ann, B.A.  
English as a Second Language
- TIMBRES, Marcia, B.A.  
Divisional Chair, College Foundations
- TOBIN, James, B.Sc.  
Adult Basic Education/D.S.C.
- TROTTER, Maureen, B.A., M.Ed., BCACC  
Social Services
- TUCK, David, T.Q. & I.P. AUTO  
Automotive Mechanics
- TUCK, Cynthia, B.Sc.  
Adult Basic Education
- TYNDALL, Greg, B.Sc., M.A. (applied)  
Psychology/Management Studies
- USHER, Peter B.P.E. (Distinction), M.A. Ph.D.  
Physical Education
- VICKERS, Jill  
Office Administration
- WALTERS, Derek, T.Q. Millwright, Cert. Mech. Eng.  
Millwright/Machinist
- WANG, Li, M.Eng.  
Electronics Engineering Technology
- WARD, Ken, B.Sc.  
Chemistry
- WEED, Valerie, B.A., M.S.W.,  
Social Services Foundations
- WELLWOOD, Carole, S.D.T., R.D.H., B.V.T.Ed.  
Dental Studies
- WENINGER, Terence, B.Sc., B.Ed., M.Ed., Ed.D.  
President
- WHARRIE, David, Diploma, Bus. Admin.  
Manager, Fundraising
- WILLIAMS, Bonnie  
Office Administration
- WILSGARD, Richard, B.A., Oregon Teaching Cert.  
Adult Basic Education
- WILSON, Cynthia, B.A., M.Ed.  
Adult Basic Education/D.S.C.
- WILSON, Michael J., C.F.C.C., Certified Journeyman  
Cook Training
- WINDSOR, James, B.E.S. (Hons.), M.N.R.M., Cert.  
Ld. Econ., M.P.A.  
Geography
- WISHART, Catherine, B. Jour  
Regional Manager, Nechako
- WONG, Frank, B.Sc., M.Sc., Ph.D., F.R.S.H.  
Biology
- YEE, Brenda, B.A., M.L.S.  
Librarian

# C

## O-OPERATIVE WORK TERM SCHEDULES

### MARKETING AND MANAGEMENT

<i>FALL</i>	<i>WINTER</i>	<i>SUMMER</i>
Semester 1	Semester 2	Work Term 1
Work Term 2	Semester 4	Work Term 3
Semester 3		

Note: Semesters 3 and 4 may be taken in reverse sequence as shown.

### TECHNOLOGY PROGRAMMES

<i>FALL</i>	<i>WINTER</i>	<i>SUMMER</i>	<i>SPRING</i>
Trimester 1	Trimester II	Trimester III	Co-op 150
Co-op 250	Trimester IV	Trimester V	Co-op 298
Trimester VI			

### ACCOUNTING AND FINANCE

<i>FALL</i>	<i>WINTER</i>	<i>SUMMER</i>
Semester 1	Semester 2	Work Term 1
Semester 3	Work Term 2	Work Term 3
Semester 4		

Basic Schedule A

<i>FALL</i>	<i>WINTER</i>	<i>SUMMER</i>
Semester 1	Semester 2	Work Term 1
Work Term 2	Semester 3	Work Term 3
Semester 4		

Optional Schedule B

### COMPUTER INFORMATION SYSTEMS

<i>FALL</i>	<i>WINTER</i>	<i>SUMMER</i>
Semester 1	Semester 2	Work Term 1
Semester 3	Work Term 2	Work Term 3
TBA	Semester 4	

Final academic Semester 4 and work terms 2 and 3 will be scheduled and approved in advance during Semester 3.



## GLOSSARY

- ABE** • Adult Basic Education
- ABESAP** • Adult Basic Education Student Assistance Programme
- ASE** • Adult Special Education
- ASTTBC** • Applied Science Technologists & Technicians of B.C.
- ATP** • Admission Testing Programme
- AV** • Audio-Visual
- BCAC** • B.C. Association of Colleges
- BCSAP** • B.C. Student Assistance Programme
- CA** • Chartered Accountant
- CAAT** • Co-operative Advanced Apprenticeship Training
- CAD/CAM** • Computer Aided Design/Computer Aided Manufacturing
- CAI** • Computer Assisted Instruction
- CE** • Continuing Education
- CGA** • Certified General Accountant
- CIS** • Computer Information Systems
- CITY U** • City University
- CMA** • Certified Management Accountant
- CNC** • College of New Caledonia
- CO-OP** • Co-operative Education
- CT** • Career Technical
- DSC** • Developmental Studies Centre
- ECCAD** • Emily Carr College of Art and Design
- ECE** • Early Childhood Education
- EDC** • Enterprise Development Centre
- EGAD** • Engineering Graphics & Design Technology
- EIC** • Employment & Immigration Canada
- ELT** • Entry Level Trades
- EMAT** • English and Math Achievement Test
- FTE** • Full-time Equivalent Student
- GED** • General Education Development (Gr. 12 equivalency)
- GMAT** • Graduate Management Admission Test
- GPA** • Grade Point Average
- HDM** • Heavy Duty Mechanics
- IMS** • Instructional Media Services
- JET** • Job Education and Training
- LPN** • Licensed Practical Nurse
- LSAT** • Law School Admission Test
- LTCA** • Long Term Care Aide
- MCAT** • Medical College Admission Test
- NIRS** • Northern Institute for Resource Studies
- NITEP** • Native Indian Teacher Education Programme
- NTE** • National Teacher Examinations
- NVIT** • Nicola Valley Institute of Technology
- OA** • Office Administration
- OLA** • Open Learning Agency
- PD** • Professional Development
- PDP** • Professional Development Programme
- PE** • Physical Education
- PVT** • Pre-Vocational Training
- RN** • Registered Nurse
- RNABC** • Registered Nurses' Association of B.C.
- SAE** • Senior Alternate Education
- SAT** • Scholastic Aptitude Test
- SFU** • Simon Fraser University
- SOFA** • Safety Oriented First Aid Certificate (St. John Ambulance)
- SSAT** • Secondary School Admissions Test
- SSF** • Social Services Foundation
- SSTP** • Social Services Training Programme
- TARGET** • Techniques for Access, Reaching Goals and Employment Training
- TEC** • Training Enterprise Centre
- TOEFL** • Test of English as a Foreign Language
- TRAC** • Training Access Programme (Trades)
- TSE** • Test of Spoken English
- UBC** • University of British Columbia
- UNBC** • University of Northern British Columbia
- UT** • University Transfer
- UVIC** • University of Victoria
- VALT** • Volunteer Adult Literacy Tutoring
- YDLI** • Yinka Dene Language Institute



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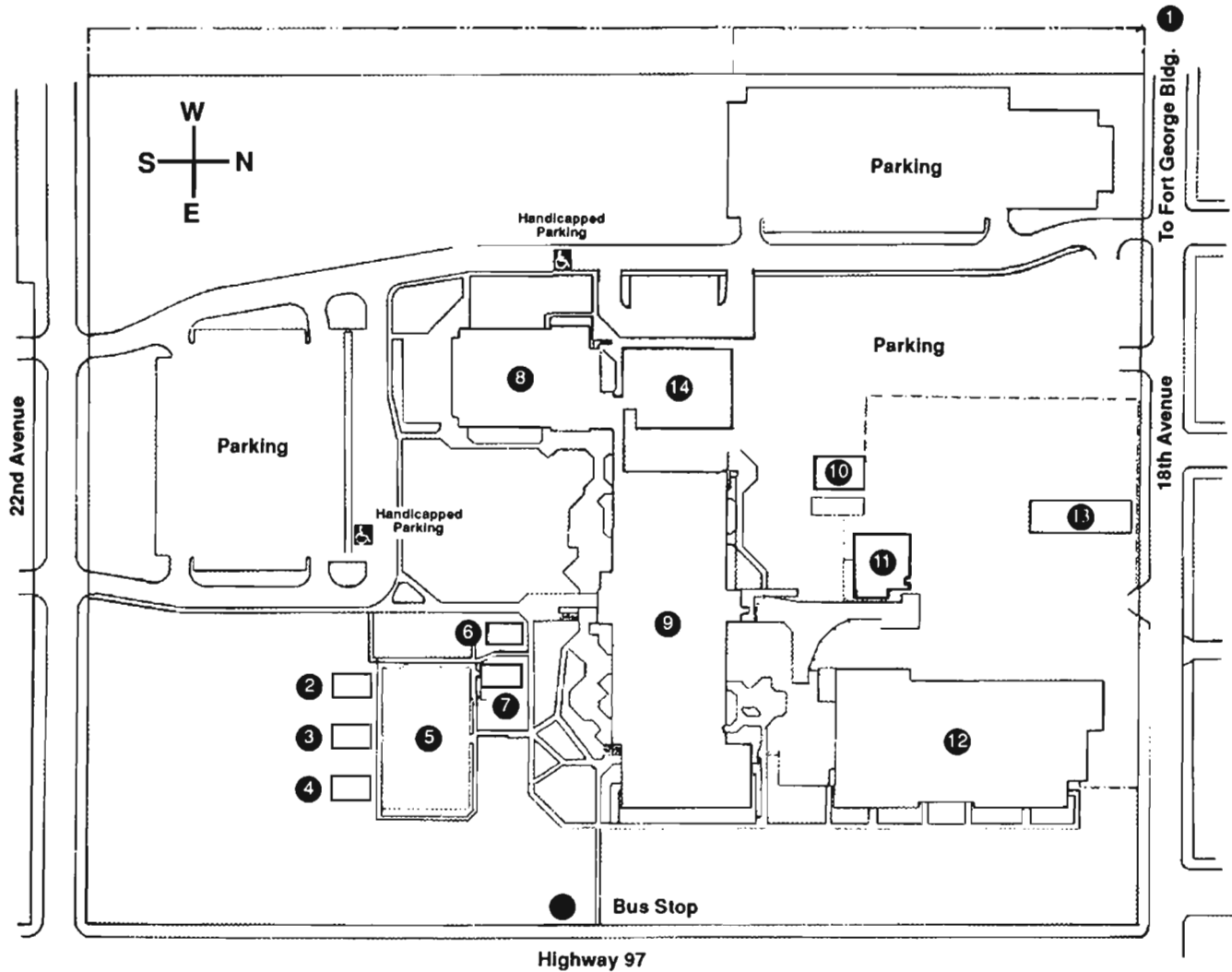


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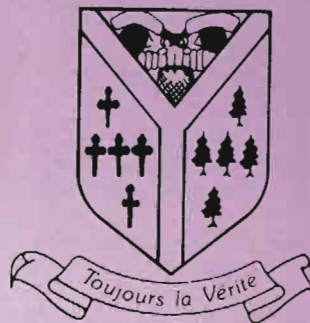


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# College of New Caledonia



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