PROGRAM ADVISORY COMMITTEE (PAC)
December 10, 2004
9:30 AM − Room A310
Abbotsford Campus

DRAFT MINUTES

Present:	P. Burkhart, B. Cooke (Chair), S. Fisher, E. Harris, M. MacDougall, H. McCullough, M. Holmes, B. Salingré, N. Sexton, J. Snodgrass, Betty,
Regrets:	S. Brigden, V. Cooke, P. Miller, D. Riel, R. Snow
Guests:	P. Cruickshanks, N. Goad, W. Gordon, D. Hudson, G. Mimmack, C. Puder, K. Watson
Recorder:	N. Egresits

CONTINUATION OF NOVEMBER 26, 2004 MEETING

2. APPROVAL OF PAC MINUTES

2.1. PAC minutes: November 26, 2004

MOTION: **J. Snodgrass/B. Salingré**

To approve the November 26, 2004 PAC minutes with the following amendment.

> ➢ Page 17 (Adventure Tourism Training calendar copy): ~~Admission process begins August 1.~~ Applications are accepted on or after August 1.

CARRIED

3. PAC BUSINESS

3.14. MATHEMATICS

3.14.1. New Courses: MATH 117 "Mathematical Communication", MATH 205 "Math for the Elementary Teacher II", MATH 315 "Applied Regression Analysis", MATH 370 "Probability and Stochastic Processes" and MATH 480 "Selection Topics in Mathematics"

A revised MATH 117 course outline was distributed prior to the meeting.

Because specific ESL courses are included in the prerequisites, the ESL department felt they should have been consulted; the Math department said this was an accidental oversight. The Math department matched the MATH 117 prerequisites with the University Foundation certificate that is coming to PAC for approval.

Students cannot take both MATH 110 and MATH 117 for credit.

MOTION: **P. Burkhart/J. Snodgrass**

To approve MATH 117 with the following amendments:

➤ Prerequisites: A C or better in BC Principles of Math 12 or equivalent; and [(ESL WG66, and RV68, and S66), or placement at the ESL 70 level ~~with~~ and Math department permission]

CARRIED

MATH 480 can be repeated for further credit on different topics.

MOTION: **J. Snodgrass/N. Sexton**

To approve MATH 205, MATH 315, MATH 370 and MATH 480 with the following amendments:

MATH 315:

➤ Transfer Credit: ~~NO~~ YES

MATH 370:

➤ Implementation date: January ~~May~~ 2005

➤ Transfer Credit: ~~NO~~ YES

MATH 480:

➤ Implementation date: January ~~May~~ 2005

➤ Calendar Description: Note: This course can be taken for further credit on different topics.

CARRIED

3.14.2. Changes to Courses (4-year reviews): MATH 112, MATH 322, MATH 402, MATH 420 and MATH 470

Most of these prerequisite changes will be implemented in September 2006. Both current and future prerequisites will be listed in the calendar.

MOTION: **N. Sexton/H. McCullough**

To approve the changes to MATH 112, MATH 322, MATH 402, MATH 420, MATH 470 with the following amendments:

MATH 402:

➤ Course to be reviewed: ~~September 2010~~ January 2009

MATH 470:

➤ Course to be reviewed: ~~September 2010~~ January 2009

CARRIED

3.14.3. Changes to Courses: MATH 152, MATH 255, MATH 330, MATH 390, MATH 450, MATH 451 (prerequisites)

MATH 255 and ENGR 255 are cross listed but changes to ENGR 255 were not presented. It needs to be determined who owns MATH/ENGR 255. Bill will contact the Engineering department to inform them of the MATH 255 prerequisite change. An updated ENGR 255 will come to PAC as an information item.

ACTION: B. Cooke and UCC Office (ENGR 255 on future PAC agenda)

MOTION: **P. Burkhart/B. Salingré**

To approve the changes to MATH 152, MATH 255, MATH 330, MATH 390, MATH 450 AND MATH 451 with the following amendment:

MATH 450:

➢ <u>Prerequisites</u>: MATH 211, <mark>MATH</mark> 221, <mark>MATH</mark> 270 <mark>or MATH 370</mark>, and at least two upper-level MATH courses.

CARRIED

3.14.4. <u>Changes to Program</u>**: Bachelor of Arts: Math Minor, Math(Statistics option) Extended Minor, Math (Statistics option) Minor**
<u>Changes to Program</u>**: Bachelor of Science: Math Minor, Math (Statistics option) Minor**
<u>Changes to Program</u>**: Bachelor of CIS: Math Minor**

MOTION: **M. MacDougall/J. Snodgrass**

To approve the changes to the Bachelor of Arts: Math minor, Math (Statistics option) extended minor, Math (Statistics option) minor; Bachelor of Science: Math minor, Math (Statistics option) minor; and Bachelor of CIS: Math minor with the following amendment:

➢ <u>Bachelor or Arts: Math minor</u>: One additional mathematics course at the 100- or 200- level (excluding Mathematics 100, 103, 104, 105, 107, 108, 109, 100, <mark>117</mark> and 205)

CARRIED

3.15. SOCIAL, CULTURAL AND MEDIA STUDIES

3.15.1. <u>Changes to Courses</u>**: ANTH 210**

MOTION: **B. Salingré/M. Holmes**

To approve the changes to ANTH 210 as presented.

CARRIED

3.15.2. <u>Changes to Courses</u>**: SCMS 355, SCMS 356, SCMS 387 and SCMS 468**

MOTION: **M. Holmes/J. Snodgrass**

To approve the changes to SCMS 387 and SCMS 468 with the following amendment:

SCMS 387:

➢ <u>Calendar Description</u>: <mark>This course</mark> ~~SCMS 387~~ looks at…

CARRIED

MOTION: **M. Holmes/J. Snodgrass**

To accept the four-year review (no changes required) to SCMS 355 and SCMS 356.

CARRIED

3.16. ECE/CYC

3.16.1. <u>Changes to Courses</u>: CYC 410A and 410B

CYC 410A and 410B seem like two separate courses, but it is actually one course that is taken over two semesters. The ECE/CYC department will consult with A&R to determine how CYC 410 should be listed in the calendar. This item will be brought back in January.

The following changes will be incorporated into the course outlines before approval: minor revisions to student evaluation, corequisites will be listed as pre- or corequisites, and former course numbers listed as corequisites and in the calendar will be removed.

3.16.2. <u>New Courses</u>: ECE 291 "Current Developments in ECE I", ECE 292 "Current Developments in ECE II", ECE 298 "Directed Studies in ECE I", ECE 299 "Directed Studies in ECE II"

ECE 291 and ECE 292 will be considered new course proposals because ECE 491 and ECE 492 have not been offered for many years. Potentially, these courses will be specialty electives for international students. As students can take ECE 291 for further credit, it was determined the ECE 292 topics course was not needed.

<u>MOTION</u>:   **H. McCullough/S. Fisher**

To approve ECE 291 with the following amendments:

➤ <u>Calendar Description (Add new sentence)</u>: This course may be taken more than once for credit, provided the course content is different from that previously taken.

➤ <u>Implementation date</u>: September ~~2004~~ 2005

➤ <u>Course to be reviewed</u>: ~~Fall 2007~~ January 2009

CARRIED

<u>MOTION</u>:   **P. Burkhart/H. McCullough**

To approve ECE 298 and ECE 299 with the following amendments:

<u>ECE 298</u>:

➤ <u>Calendar Description</u>: This course provides students opportunities to work….specified area. ~~May be taken more than once for credit, provided the course content in different from that previously taken.~~

➤ <u>Implementation date</u>: September ~~2004~~ 2005

➤ <u>Course to be reviewed</u>: ~~Fall 2007~~ January 2009

<u>ECE 299</u>:

➤ <u>Calendar Description</u>: This course provides students opportunities to work….specified area. ~~May be taken more than once for credit, provided the course content in different from that previously taken.~~

➤ <u>Implementation date</u>: September ~~2004~~ 2005

➤ <u>Course to be reviewed</u>: ~~Fall 2007~~ January 2009

CARRIED

3.17. NURSING
Changes to Program: Bachelor of Nursing

The proposed changes will allow LPNs to ladder in to the Bachelor of Nursing. It was noted that LPN students will need access to HSC 110 and 112; currently these courses are reserved for BSN students. The department will allow students to take these courses if they are not in the program.

Wanda and Nancy will speak to Elaine about calendar copy (including references to identification documents).

MOTION: **M. Holmes/J. Snodgrass**

To approve the changes to the Bachelor of Nursing entrance requirements as presented.

CARRIED

RECOMMENDED TO UCC FOR APPROVAL

3.18. INTERNATIONAL EDUCATION

New Program: University Foundation Certificate

This program is not currently on the education plan, but will be presented to UCC for approval this afternoon. If PAC approves the program, subject to UCC approval, the program can be put in the calendar and can be advertised.

This program is oriented for those who have English as a second language, and is tied to the English Language policy that is being developed. Successful completion of the program implies students have met UCFV's language requirements, though these language requirements are not currently in place.

Comments:

- Assessment tests, that UCFV does not offer, are included. These assessment tests have not been validated by UCFV, and must be approved by ASC. The CPT has been approved by ASC but was only approved for ENGL and CMNS courses so it is not included as an assessment test.

- ESL courses should have an average GPA of 2.33.

- GPA for academic warning should be changed from 2.33 to 2.0.

- There is confusion over program requirements vs. requirements to graduate from the certificate. Students only have to take 9 credits of required courses in each level to meet UCFV's language requirements. For program electives, there is a three course maximum but there is no course minimum. Completion of both levels only requires 18 credits since electives are optional. However, the certificate requires 30 credits.

Some program details need to be ironed out. This program will be presented to PAC in January for approval.

3.19. COMPUTER INFORMATION SYSTEMS

3.19.1. Changes to Program: Security concentration

MOTION: **J. Snodgrass/M. MacDougall**

To approve the Security concentration for the Bachelor of Computer Information Systems as presented.

CARRIED

RECOMMENDED TO UCC FOR APPROVAL

3.19.2. <u>**Changes to Course and New Courses**</u>**: CIS 145, CIS 221 "Principles of Information Systems Security", CIS 297 "Internet Investigation II", CIS 298 "Internet Investigation III", CIS 325 "Malicious Software and Attack Prevention" and CIS 497 "Advanced Topics in Information Security"**

CIS 297 and CIS 298 will be part of the BGS (Police Studies) and will be taught by the CIS department for the Criminal Justice department.

The memo states the incorrect prerequisites for CIS 221 but the official course outline lists the correct ones.

<u>**MOTION:**</u>   **M. McDougall/H. McCullough**

To approve CIS 145, CIS 221, CIS 297, CIS 298, CIS 325 and CIS 497 with the following amendment:

<u>**CIS 297**</u>**:**

➢ <u>Prerequisites</u>: RCMP Internet for Investigators (Basic) or permission of instructor.~~,~~ ~~background security check.~~

CARRIED

3.19.3. <u>**MOTION:**</u>   **B. Salingré/J. Snodgrass**

To approve the addition of the CIS electives in the CIS diploma and Bachelor of CIS degree as presented.

CARRIED

5. ADJOURNMENT

The meeting adjourned at 12:15 PM.

CALENDAR COPY CHANGES

3.14 MATHEMATICS

New Courses: MATH 117, MATH 205, MATH 315, MATH 370, MATH 480
Changes to Courses (4-year reviews): MATH 112, MATH 322, MATH 402, MATH 420, MATH 470
Changes to Courses: MATH 152, MATH 255, MATH 330, MATH 390, MATH 450, MATH 451 (prerequisites)

Calendar Copy (page 290-292)

MATH 117:

Mathematical Communication   *3 credits*

Prerequisites: A C or better in BC Principles of Math 12 or equivalent; and [(ESL WG66, and RV68, and S66), or placement at the ESL 70 level and Math department permission].

Transferability: For transferability see the B.C. transfer guide at www.bccat.bc.ca

This course is designed for students who have moderately strong mathematical backgrounds but whose first language is not English. It is meant to prepare such students for success in subsequent mathematics and statistics courses at UCFV by providing extensive practice in using both written and spoken English in the context of mathematical problem-solving.

Note: Students may obtain credit for only one of MATH 100, MATH 110, or MATH 117.

MATH 205:

Math for the Elementary School Teacher II   *4 credits*

Prerequisites: MATH 105 with a C or better

Transferability: For transferability see the B.C. transfer guide at www.bccat.bc.ca

This course will continue the aims of MATH 105 by providing a direct experience of mathematics and by encouraging students to explore reasoning strategies in solving problems appropriate to the elementary school curriculum. This course is designed to develop confidence in verbalizing mathematics to one's peers as well as to students in an elementary classroom. Fifteen hours of elementary classroom observation is mandatory. Topics include strategies in problem solving, descriptive statistics, an introduction to probability, coordinate geometry, elementary logic, modular arithmetic, and an introduction to graph theory.

MATH 315:

Applied Regression Analysis   *3 credits*

Prerequisites: MATH 104 with a B+ or better, or MATH 106 with a B or better, or MATH 270
Transferability: Check with the institution you wish to attend.

This is a practical course on the use and understanding of linear regression analysis. A statistical computer package such as MINITAB (or S-plus or SAS) software is used throughout the course. Topics include the method of least squares, the analysis of variance table, F tests, selection of predictor variables, diagnostics, remedial measures and validation, qualitative predictor variables, the comparison of regression models, the analysis of covariance, nonparametric regression, introduction to nonlinear regression analysis, and logistic regression. Students complete at least one group project using a real data set.

MATH 370:

Probability and Stochastic Processes   *3 credits*

Prerequisites: MATH 211, MATH 270
Transferability: Check with the institution you wish to attend.

This course covers the theory of probability and stochastic processes for science and mathematics students who have experience with second-year calculus and elementary probability and statistics. Topics include probability space, conditional probability and independence, continuous and discrete random variables, jointly distributed random variables, expectation, conditional expectation and properties, limit theorems, Markov chains and Poisson processes, lifetime distributions, Cox's proportional hazard model, Kaplan-Meier estimate of the survival function, and simulation.

MATH 480:

Selected Topics in Mathematics   *3 credits*

Prerequisites: Four upper-level Mathematics courses. Certain programs of study may require more particular prerequisites. The written permission of the instructor is required.
Transferability: Check with the institution you wish to attend.
This course is designed for students who wish to examine in greater depth a particular topic in mathematics. It will be offered either as an individual reading course or as a seminar, depending on student and faculty interest.

Note: This course can be taken for further credit on different topics.

Calendar Copy (page 289-292)

THE COURSE TITLE FOR MATH 470 HAS CHANGED. PLEASE DO A GLOBAL SEARCH TO ENSURE ALL INSTANCES OF THIS COURSE NAME ARE CHANGED.

MATH 112:
Calculus II   *4 credits*
Prerequisites: MATH 111 with a C or better
Transferability: UBC, SFU, UVic, OU, TWU
Calculus I is concerned with finding the characteristics of change of a given quantity. In Calculus II, we examine the change in the reverse: if we know the way a quantity changes, can we determine what the quantity is?

Topics include techniques of integration; application of the definite integral to various problems such as areas, volumes, fluid pressure and population growth; improper integrals and their applications; an introduction to differential equations; polynomial approximations to functions; and sequences and series.

Students may receive credit for only one of MATH 112 and MATH 116.

MATH 322:
Complex Variables   *3 credits*
Prerequisite: MATH 211
Transferability: OU, SFU
~~An introduction to complex analysis, and its applications~~
This course provides an introduction to complex analysis and its applications. Topics include the algebra of complex numbers, geometry of the complex plane, analytic functions, contour integration, complex power series, residue theory, and an introduction to conformal mapping.

MATH 402:
Generalized Linear Models and Survival Analysis   *3 credits*
Prerequisites: MATH 270, MATH 302 (Effective September 2006, the prerequisites will be: MATH 302 or MATH 315, and MATH 370)
~~This course applies the methods of linear model analysis, developed in MATH 302, to non-normal data.~~
The course covers the application of the methods of the linear model analysis developed in MATH 302, MATH 315, and MATH 330 to non-normal data. This includes analysis of contingency tables using log-linear models, analysis of incidence data using Poisson models, analysis of binomial data using various link functions such as logit and probit, analysis of case-control data using logistic models, analysis of matched case-control data using logistic models, analysis of matched case-control data using conditional logistic regression, and analysis of survival data by adjusting for covariates or using Cox's proportional hazard model.

MATH 420:
Empirical and Non-Parametric Statistics   *3 credits*
Prerequisites: MATH 211, MATH 270. ~~MATH 221, and additional upper-level statistics courses recommended.~~
Empirical and non-parametric statistics are used either when little can be assumed about the underlying distribution or when it is very complex. These methods are based on order statistics, rankings, or resampling, and are very useful when a relatively quick answer is required.

MATH 470:
Applied ~~Methods of~~ Multivariate ~~Statistics~~ Statistical Analysis   *3 credits*

Prerequisites: MATH 211, MATH 221, MATH 270, MATH 302, and two additional upper-level courses. (Effective September 2006, the prerequisites will be: MATH 221 and MATH 370.)
~~The course is an extension of the linear model methods of MATH 302 to the multivariate situation. It examines a range of widely-used multivariate statistical techniques, their relationship with familiar univariate methods, and the solution to practical problems.~~
This course is the extension of the linear model methods of MATH 302 and MATH 315 to the multivariate situation. The emphasis of the course is on examination of a range of widely-used multivariate statistical techniques, their relationship with familiar univariate methods and the solution to practical problems. Topics include Hotelling's T^2, the analysis of dispersion, multivariate regression, principal components, factor analysis, canonical correlations, and discriminant analysis. Although theory is discussed, the emphasis is on applications.

Calendar Copy (page 290-292)

MATH 152:
Linear Algebra for Engineering   *4 credits*
Pre- or Corequisite: MATH 112

MATH 255:
Ordinary Differential Equations   *3 credits*
Prerequisites: MATH 112 ~~and one of: MATH 152, or MATH 221, or PHYS 221 (Note: MATH 221 or PHYS 221 may be taken as a prerequisite or corequisite.)~~
~~Corequisites: MATH 211; and one of MATH 221, PHYS 221, unless MATH 152 already completed~~
Pre- or Corequisites: MATH 211 and one of MATH 152, MATH 221, PHYS 221
Transferability: UBC, SFU, UVic
Most mathematical models of a physical process are in the form of differential equations. This course provides various techniques and ideas in solving ordinary differential equations with an emphasis on applications. Graphing calculators and Maple are used in this course. Topics include first- and second-order linear differential equations, non-linear equations, series solutions, Laplace transform methods, and linear systems.

Note: This course is also offered as ENGR 255. Students can receive credit for only one of MATH 255 and ENGR 255.

MATH 330:
Design of Experiments   *3 credits*
Prerequisite: ~~MATH 302~~ MATH 270
Transferability: SFU

MATH 390:
Time Series and Forecasting   *3 credits*
Prerequisites: MATH 270, and MATH 302 (Effective September 2006, the prerequisites will be: MATH 270, MATH 211.)

MATH 450:
Statistical Distribution Theory   *3 credits*
Prerequisites: MATH 211, MATH 221, MATH 270 or MATH 370, and at least two upper-level MATH courses. (Effective September 2006, the prerequisites will be: MATH 370.)

MATH 451:
Parametric Statistical Inference   *3 credits*
Prerequisites: MATH 450, or MATH 270 and (MATH 280 or MATH 460) and MATH 211 and at least two upper-level courses. (Effective September 2006, the prerequisites will be: MATH 450.)

Changes to Program: Bachelor of Arts: Math Minor, Math (Statistics option) Extended Minor, Math (Statistics option) Minor

Calendar Copy (page 67)

Bachelor or Arts
Mathematics minor requirements

Lower-level requirements: 14-16 credits
- Mathematics 111 or 115
- Mathematics 112 or 116
- Mathematics 211
- Mathematics 221 or 152

One additional mathematics course at the 100- or 200-level (excluding Mathematics 100, 103, 104, 105, 107, 108, 109, and 110, 117 and 205)

Bachelor of Arts
Mathematics (Statistics option) extended minor requirements

Lower-level requirements: 32-33 credits
- Mathematics 111 or 115
- Mathematics 112 or 116
- Mathematics 211
- Mathematics 221
- Mathematics 255
- Mathematics 270
- COMP 150
- COMP 155 or Mathematics 235

One additional second-year Mathematics course (excluding MATH 205)

Upper-level requirements: 18 15 credits

- Mathematics 302

- 15 credits from: Mathematics 308 or 360; 315, 330, 350, 370, 390….488.

Bachelor of Arts

Mathematics (Statistics option) minor requirements

Upper-level requirements: 18 15 credits
- Math 302

15 credits from: Mathematics 308 or 360, 315, 330, 350, 370, 390, 402, 420, 450, 451, 460, 470, 488

Changes to Program: Bachelor of Science: Math Minor, Math (Statistics option) Minor

Calendar Copy (page 156)

Bachelor of Science
Mathematics minor requirements

Lower-level requirements:
MATH 111
MATH 112
MATH 211
MATH 221
Plus COMP 150
Plus once course from:
COMP 155
MATH 235
PHYS 484
Plus two additional 200-level MATH courses (excluding MATH 205)
Plus one of the following two-semester sequences:
CHEM 111 & CHEM 112
CHEM 113 & CHEM 114
PHYS 111 & PHYS 112
BIO 111 & BIO 112

Bachelor of Science

Mathematics minor (statistics option)

Upper-level requirements

~~Math 302~~

~~Plus~~15 credits from:

MATH 308 or MATH 360

<mark>MATH 315</mark>

MATH 330

MATH 350

<mark>MATH 370</mark>

MATH 390

MATH 402

MATH 420

MATH 450

MATH 451

MATH 460

MATH 470

MATH 488

<u>Changes to Program</u>: Bachelor of CIS: Math Minor

Calendar Copy (page 131)

Minor in Mathematics

Upper-level requirements

CIS 385

CIS 390

CIS 440

CIS 485

COMP 340

7 CIS/COMP courses numbered 300 or higher

1 CIS/COMP course numbered 200 or higher

MATH 211

MATH 221

MATH 270

<mark>MATH 302 or o</mark>ne ~~(3-4)~~ 200-level Mathematics course* <mark>(excluding MATH 205)</mark> ~~or MATH 302~~

15 credits Mathematics courses numbered 308 or above

*MATH 225 is strongly recommended.

3.15 SOCIAL, CULTURAL AND MEDIA STUDIES
Calendar Copy (page 221)

<u>Changes to Courses</u>: ANTH 210

<mark>**THE COURSE TITLE FOR ANTH 210 HAS CHANGED. PLEASE DO A GLOBAL SEARCH TO ENSURE ALL INSTANCES OF THIS COURSE NAME ARE CHANGED.**</mark>

ANTH 210:

Kinship and Gender~~: An Introduction~~   *3 credits*

Prerequisites: ANTH 102 <mark>or SOC 101</mark>

Transferability: For transferability see the B.C. transfer guide at www.bccat.bc.ca

~~Anthropology 210 is an introduction to studies of kinship and gender, using examples from a variety of societies and cultures. Topics may include social structure and kinship, the place of gender in stratification systems such as caste and class, ceremonies which emphasize gender, and the ways in which various social structures have changed. This course draws extensively on anthropological studies of small-scale and tribal societies, such as the Dobe Ju'hoans of southern Africa, the Trobriand Islanders of the South Pacific, the Haida of the Northwest Coast, the Nuer and Masai of east Africa, and others.~~

<mark>Anthropology 210 is an introduction to studies of kinship and gender, using examples from a variety of societies and</mark>

==highlighted== cultures. Topics may include social structure and kinship, the place of gender in stratification systems such as caste and class, ceremonies which emphasize gender, and the ways in which various social structures have changed. This course draws extensively on anthropological studies of small-scale and tribal societies.

Calendar Copy (page 310-311)

Changes to Courses: SCMS 387, SCMS 468

SCMS 387 (formerly ANTH 387, SOC 387):
Canadian Native Peoples   *4 credits*
Prerequisites: 45 credits, to include ANTH 102 and at least three additional credits of anthropology and/or sociology
Transferability: Check with the institution you wish to attend.
Disciplinary focus: ANTH, SOC
~~The study of traditional Canadian Native culture and contemporary issues. The focus of the course will vary from semester to semester.~~
This course looks at selected studies of cultural patterns and contemporary issues of Aboriginal peoples of Canada (including First Nations, Inuit, and Metis).

SCMS 468 (formerly ANTH 468, SOC 468):
Environment and Society   *4 credits*
Prerequisites: 60 credits, to include ANTH 102 and at least six additional credits of sociology and/or anthropology
Transferability: Check with the institution you wish to attend.
Disciplinary focus: ANTH, SOC
~~This course examines ecological and environmental approaches and studies in anthropology and sociology, and studies of environmental issues in contemporary situations. Topics include relationships between forms of social organization and resource use, studies of resource-use conflicts, and the ways in which different cultures view the environment. This course draws extensively on case studies by anthropologists and sociologists, with a special emphasis on the Pacific Northwest and communities in the Fraser River watershed.~~
This course examines anthropological and sociological approaches to ecological and environmental issues Topics include relationships between forms of social organization and resource use, studies of resource use conflicts, and the ways in which different cultures view the environment.

3.16 ECE/CYC
Calendar Copy (page 252)

Changes to Courses: ECE 291, ECE 298, ECE 299

ECE 291 (formerly ECE 491):
Current Developments in ECE I   *1.5 credits*
Prerequisites: None
A selection of current topics are addressed in workshop or mini-course format or as summer institutes.

This course may be taken more than once for credit, provided the course content is different from that previously taken.

ECE 298 (formerly ECE 498):
Directed Studies in ECE I   *3 credits*
Prerequisites: None
This course provides students opportunities to work on research projects, directed readings, or additional course work in a specified area.

ECE 299 (formerly ECE 499):
Directed Studies in ECE II   *1.5 credits*
Prerequisites: None
This course provides students opportunities to work on research projects, directed readings, or additional

course work in a specified area.

3.17 NURSING
Calendar Copy (page 165)

<u>Changes to Program</u>: BSN

Nursing

The UCFV Nursing program is designed to meet the needs of two groups: students who wish to pursue a career in nursing and RNs who wish to complete a nursing degree. The degree prepares graduates for employment in a variety of health care settings.

  The Nursing program has one intake per year in September and provides two possible streams as follows:
   • **Bachelor of Science in Nursing degree (BSN)** (four years)
   • ~~RN~~ **LPN Access — Bachelor of Science in Nursing degree** (BSN) ~~(part-time option). The last intake for this option will be September 2004~~. This option will provide an opportunity for Licensed Practical Nurses to bridge into the nursing program. The first intake of students will begin September 2006. The number of students admitted will depend on seat availability.

~~**Note:** Practical Nursing Access to the BSN program is planned for a future date. This access option will provide an opportunity for Licensed Practical Nurses to bridge into the nursing degree program.~~

The Nursing program offers instruction in nursing, health sciences, social sciences, and research, and an opportunity for advanced focus in a variety of areas.

Calendar Copy (page 167) *Calendar copy: Please delete the "RN Access applicant" calendar information from Academic Entrance Requirements, up to but not including Fees and expenses, and replace with the following:*

LPN Access applicants

Academic entrance requirements

1. English 105 or equivalent with a minimum of C grade.

2. HSC 110 and HSC 112 or equivalent with a minimum of C grade or completion of a challenge exam with a minimum of C grade.

3. Successful completion of ESL Advanced Speaking, Listening and Writing course sequence may be required for applicants for whom English is not a first language.

Other requirements

1. Current full scope practicing registration as a Licensed Practical Nurse in BC.

2. One written reference (from manager/supervisor) indicating your work as an LPN within two years prior to application for admission.

3. Basic Rescuer — Level C certificate. Currency must be maintained throughout the program.

4. Identification documents — birth certificate, marriage certificate, verification of change of name, landed immigrant status.

5. Successful completion of a security clearance check. Criminal records check forms will be included with the letter of notification regarding an interview.

6. A health assessment, completed by a physician, indicating physical fitness and emotional stability.

The assessment must be completed within 12 months prior to enrolment. Health questionnaire forms will be included with the letter of notification regarding an interview. Please bring the completed questionnaire to your interview.

7. Completion of an immunization program prior to the program start date. Immunization forms will be distributed at the time of the interview and must be received by the date specified. A Hepatitis B immunization will be provided upon entry into the Nursing program. Applicants who have completed the Hepatitis B immunization prior to entry to the program must submit proof of immunization.

8. Attendance at an information session in preparation for entry into the program.

9. Interview with a faculty member to assess the following:
• Basic knowledge of the field
• Time-management skills
• Communication skills: ability to listen and articulate ideas
• Financial resources and support systems
• Personal and work commitments in relation to assuming the demands of an applied academic program of studies.

10. Valid driver's license: You are responsible for arranging your own transportation to class, labs, hospitals, and other community agencies throughout the Fraser Valley.

How to Apply

1. You may apply to the program prior to the completion of all entrance requirements. The following documents must be submitted to the Admissions & Records department, along with the application fee, in order to process your application.

   ▪ UCFV application form
   ▪ Nursing program application
   ▪ Prerequisite course(s) – submit a registration form or interim grade for English 105 or equivalent. Submit registration grade form or interim grades for HSC 110 and HSC 112 or equivalent or registration for an Anatomy and Physiology challenge exam.

   Once these documents have been received by the Admissions & Records office, an application date will be recorded and your application will be forwarded to the nursing program.

2. Submit all remaining documents to the Health Sciences Centre, Chilliwack campus. *Applicants will be considered for the program based on:*

   ▪ Complete applicant status
   ▪ Date of application
   ▪ Available sets

   Documents required in order to achieve "complete applicant" status for LPN applicants:

   ▪ Nursing program application form
   ▪ Proof of completion of English 105 or equivalent requirement
   ▪ Proof of completion of HSC 110 and HSC 112 or equivalent or challenge exam requirement
   ▪ Proof of full scope practicing registration as an LPN
   ▪ Completed reference form
   ▪ Basic Rescuer — Level C certificate
   ▪ Official identity documents (birth certificate, marriage certificate, verification of change of name, landed immigrant status)
   ▪ Proof of valid driver's license
   ▪ Completion of ESL Advanced Speaking, Listening and Writing course sequence as

3. Attendance at a program information session and an interview with the program faculty is required for all applicants. Preference will be given to those with "complete applicant" status. You will be contacted when dates and times have been established.

4. You will be notified in writing regarding your acceptance. Upon acceptance to the program you will be provided with registration information. A deposit is required by a specified date in order to reserve a seat in the program. This money will be applied to the tuition fees and is not refundable. If you do not register for courses and pay the deposit, your place will no longer be held for you.

3.19 COMPUTER INFORMATION SYSTEMS
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Changes to Course: CIS 145
New Courses: CIS 221, CIS 297, CIS 298, CIS 325, CIS 497

CIS 145:
Web Publishing   *3 credits*
Co- or prerequisites: Familiarity with computers is essential for success in this course. Students should consult the CIS web page at www.ucfv.ca/cis for details.
Transferability: For transferability see the B.C. transfer guide at www.bccat.bc.ca
~~The objective of this course is to teach students how to design, organize, and maintain a basic website. Students will learn how to publish a working website on the World Wide Web using HTML scripting, multi-media plug-ins, cascading style sheets, and JavaScript programming at an introductory level. This course is intended for students with no prior knowledge of HTML or basic web skills. Student with experience with HTML should take CIS 146.~~
~~Note:~~ ~~Students cannot obtain credit for both CIS 145 and 146 in CIS programs.~~
Students will design, organize, publish, and maintain a website, applying HTML, scripting, multimedia plug-ins, cascading style sheets and JavaScript programming. We will discuss the issues that affect operational aspects of an Internet site. This course is intended for students with no prior knowledge of HTML.

CIS 221:
Principles of Information Systems Security   *4 credits*
Prerequisites: COMP 150, CIS 192

Transferability: For transferability see the B.C. transfer guide at www.bccat.bc.ca
This course provides an introduction to proven techniques for protecting information systems from intruders, while allowing the required access to authorized users. This course is introductory and is designed to provide an overall view of security in the modern information world. Several hands-on lab projects will be completed using Linux- and/or Windows-based computer systems.

CIS 297:
Internet Investigation II   *4 credits*
Prerequisites: RCMP Internet for Investigators (Basic) or permission of instructor.
This course focuses on Internet and computer security issues and their relationship to secrecy and the interception of communications. In addition to an introduction to the "hacker" subculture, this course also covers some of the tools used by hackers to exploit computer systems vulnerabilities and destroy data. Criminal law studies related to information technology will be covered, as will an introduction to the computer forensic examination process.

CIS 298:
Internet Investigation III   *4 credits*
Prerequisites: CIS 297, permission of the department
This course will provide students with an understanding of the Internet-based network architecture, and will introduce vocabulary and concepts that will assist students in understanding computer networks, particularly as they relate to police investigations and security breaches. General theory regarding the interception of internet and network-based communications will be covered, as will some techniques that may be employed for it. Issues that commonly surface during an investigation involving a Local Area Network (LAN) will be discussed. In addition to learning how to trace e-mail to its point of origin, students

will be introduced to Linux and UNIX, the most common operating systems found on servers connected to the Internet.

CIS 325:

Malicious Software and Attack Prevention *4 credits*

Prerequisites: CIS 221, acceptance to the CIS degree program. (Students accepted to a CIS or Computing Science minor may register with permission of the department).

Transferability: Check with the institution you wish to attend.

This course will provide students with proven techniques for allowing authorized users access to the Internet while protecting the inner network from attack by someone who has circumvented the outer defense or from internal attack. Methods and technologies such as secure programming, viruses, host-based intrusion detection, auditing, threat modeling, forensics, software firewalls, and operating system hardening will be discussed.

CIS 497: *4 credits*

Advanced Topics in Information Security

Prerequisites: Acceptance to the CIS degree program. (Students accepted to a CIS or Computing Science minor may register with permission of the department). Other prerequisites determined by instructor and topic.

This advanced topics course is designed to provide study of the latest up-to-date technologies and issues in information security not covered in other courses. Topics may be drawn from areas such as physical and network security, secure programming, policies and ethics, intrusion detection, OS hardening, cryptography, cultural issues, forensic issues and others. Topics will vary depending on semester and instructor. Students should consult the department for current offerings.

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Changes to Program: Security concentration

Security

The five core upper-level CIS/COMP courses:
- CIS 385 Project Management
- CIS 390 Data Communications
- CIS 440 Project
- CIS 485 Ethics & Other Management Issues
- COMP 340 Operating Systems

plus
- CIS 321 Fundamentals of Network Security
- CIS 325 Malicious Software and Attack Prevention

And any three of
- CIS 341 System Administration
- CIS 393 Remote Access Internetworking
- CIS 497 Advanced Topics in Information Security
- COMP 490 Network Security and Cryptography

Also
- 2 CIS or COMP courses numbered 300 or above.
- 1 CIS or COMP course numbered 200 or above.

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Changes to Program: Computer Information Systems diploma

Year Two
Winter Semester

Note[1]: CIS electives: diploma students will take two of:

Course	Title	Credits
CIS 221	Principles of Information Systems Technology	4
CIS 245	Intermediate Web Programming	4
CIS 280	Client/Server Programming	4
CIS 292	Wide Area Networking I	4
CIS 296	Network Operating Systems	4

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Changes to Program: Bachelor of Computer Information Systems

Winter semester

Course	Title	Credits
CIS 440	Project	3
CIS or COMP	Course numbered 300 or above	3
CIS or COMP	Course numbered 300 or above	3
CIS or COMP	Course numbered 300 or above	3
Elective	Upper-level elective in another discipline	3

Note[1]: The current approved Arts elective options are available online at:
www.ucfv.ca/cis/courses/artselectives.htm
Note[2]: Business or Communications electives options: BUS 100, 102, 120, 143, 144, 145, 162, 201, 203, 223, or CMNS 212, 235, or 275.
Note[3]: CIS/COMP courses numbered 300 or above elective option. See below:

Course	Title
CIS 325	Malicious Software and Attack Prevention
CIS 341	System Administration
CIS 370	Software Engineering
CIS 371	Object-oriented Modeling and Design
CIS 380	Artificial Intelligence
CIS 392	Internetworking
CIS 430	Advanced Database Topics
CIS 480	Decision Support Systems
CIS 495	Advanced Topics in Computer Systems
CIS 496	Advanced Topics in Computer Applications
CIS 497	Advanced Topics in Information Security
COMP 350	User Interface Design & Programming
COMP 351	Advanced Website Programming
COMP 360	Computer Graphics
COMP 445	Web Server Installation & Maintenance
COMP 455	Distributed Programming
COMP 490	Network Security & Cryptography