VANCOUVER ISLAND UNIVERSITY

PROGRAM REVIEW

2011 – 2012

FORESTRY DEPARTMENT

FACULTY OF SCIENCE AND TECHNOLOGY

Program Data and Analysis Report

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REPORT HIGHLIGHTS

This report presents the results of surveys and analysis conducted by the Office of Educational Planning. It is only one component of the program review process, which also includes a faculty/industry advisory focus group, a departmental self-study report, an external panel review, and a departmental action plan.

Report highlights are split into three categories: strengths, weaknesses, and areas for possible additional inquiry. Additional detail on each of these strengths, weaknesses and areas for additional inquiry can be found in the body of the report.

Percentages indicate the amount of agreement with or positivity towards the statements by students, as noted.

PROGRAM STRENGTHS

 Strengths are identified on the basis of strong student agreement or satisfaction with certain aspects of the Forestry program.

These results show the percentage of Forestry majors and minors that agreed with each of the statements listed. All instances of 80% or greater agreement are shown below.

Overall Student Satisfaction
In general, student satisfaction levels regarding the Forestry Program were very high. For example:

- Faculty were available, approachable, and helpful outside of class time (92%).
- Pre-requisite courses ensured that students were prepared for more advanced courses (91%).
- Faculty were knowledgeable in their fields of expertise (91%).
- Course outlines accurately described course content, feedback, grading methods, and delivery (90%).
- The program did a good job meeting its primary objective: "to develop foundational concepts, practical skills and critical thinking in order to promote success in a forestry-related career or post-graduate educational pursuit" (86%).
- Students agreed they would recommend the program to others (86%).
- Methods of teaching such as lectures, seminars and class discussions were helpful in assisting students to learn effectively (86%).
- Students had sufficient opportunities to practice the skills they learned in the program (85%).

- Quality of instruction was good overall (85%).
- Assignments were designed to promote a deeper understanding of the material (83%).
- Progression of challenge from lower to upper-level courses was logical (82%).
- Course content was appropriate to a university-level program (82%).
- Admission requirements were sufficient to promote student success (82%).
- Morale was generally good in the program (82%).
- The program objective was made clear to students (81%).
- Evaluation methods fairly reflected students' performance (80%).

Area of Focus: Employment
- Ninety-five percent of students agreed that the Forestry department actively supported students to get a summer job.
- Eighty-four percent of students in the program got a forestry-related summer job.
- The program is useful for students in performing their jobs (81%); this score exceeded the VIU average by 13ppts.
- Although not in the strength zone of 80% or higher, the score for the program's usefulness in finding a job (78%) was 15ppts higher than the VIU average.

Area of Focus: General Skills
The Forestry program excelled in the teaching of six general skills associated with a university or technical education program.
- Using math and numeracy appropriate to the field (89%); 38ppts higher than the Vancouver Island University (VIU) average.
- Reading and comprehending material appropriate to the field (88%).
- Analyzing information and thinking critically (87%).
- Working collaboratively with others (84%).
- Independent learning (83%).
- Thinking creatively and flexibly to solve problems (82%).

Furthermore, although not in the strength zone, one general skill exceeded the VIU average by a fair margin:
- Using technology hardware and software appropriate to the field (71% versus 61%; 10ppts).

PROGRAM WEAKNESSES

Weaknesses are identified on the basis of low student agreement or satisfaction with certain aspects of the Forestry program (less than two-thirds or 67%).

- Only 63% of Forestry students agreed that the program taught them the general skill of "writing clearly and concisely;" this is also 14ppts below the VIU non-degree average.
- The additional costs for the program are good value for money spent (e.g., books, equipment, first aid training, etc.) (57%).
- Transportation arrangements are satisfactory for off-campus field labs (54%).

INSTITUTIONAL STRENGTHS

Institutional strengths are identified on the basis of high student satisfaction or agreement with statements about the overall institutional environment at VIU.

- Students experienced intellectual/personal growth at VIU (91%).
- Class size was listed as the top strength of VIU students (90%).
- Classrooms were satisfactory (87%).
- Students are made to feel welcome (86%).
- Overall, students are satisfied with VIU (82%).

INSTITUTIONAL WEAKNESSES

Institutional weaknesses are identified on the basis of low student or faculty satisfaction or agreement with statements about the overall institutional environment at VIU, rather than that of the department.

- There is a sense of community among students (61%).
- VIU is student-centred (58%).
- Students are proud about attending VIU (55%).
- Athletic programs contribute to a sense of school spirit (44%).
- Parking was listed as a weakness by 59% of Forestry students; this is the greatest weakness listed.

AREAS FOR FURTHER INQUIRY

The department may choose to explore these subjects through further research or exploration following the program review.

- The Forestry department operates a customized website, which includes a listing of four program offerings. However, Student Records System (SRS) records only list two programs. This is likely due to the non-credential nature of some of the programs listed on the Forestry homepage. However, the disconnect between the department and the SRS resulted in incomplete (and possibly inaccurate) analysis of enrolment numbers in this report.
- Students were asked whether their program was challenging but manageable and were given the opportunity to answer "too easy," "about right," or "too challenging." A majority (57%) said the program was too hard. Comments supported this statistic, centered on a heavy load of coursework and homework. This may indicate that the obligation and challenge required by the program are not being fully explained to prospective students.
- Overall satisfaction with VIU ranged from 67% satisfied among students aged 35+ to 92% satisfied for the 17-24 group.
- Single students were more satisfied than students in a couple (88% versus 72%).
- Students who relocated were more satisfied than students who did not (88% versus 67%).

INTRODUCTION AND BACKGROUND

PURPOSE OF REPORT

The purpose of this program Data and Analysis Report is to provide the analysis of the sources of data used in the program review process for the Forestry program.

STRUCTURE OF REPORT

The Program Data and Analysis Report is organized into seven sections:

- Introduction and Background
- Mission and Goals
- Program Structure, Curriculum and Delivery
- Student Enrolment and Outcomes
- Student Experience and Learning Environment
- Faculty Experience

These section headers correspond to the criteria outlined in VIU Educational Policy 31.15.002: Assessment and Review of Existing Instructional Programs and Units.[1] Where items overlap in their themes, small adjustments were made in this report to better accommodate report flow and logical content for each section.

The report also includes an appendix that contains all of the survey data presented in tables.

PROGRAM REVIEWED

The Forestry department at VIU offers multiple streams: a Forestry Diploma, a one-year bridging program, and a two-year bachelor transfer program. The department is part of the Faculty of Science and Technology, administered by Dr. Greg Crawford, Dean.

In Spring 2012, the Forestry department had 5.5 FTE regular faculty members.[2] In 2010-11, 55 students were enrolled in two programs recognized by VIU's Student Records System (SRS): 48 in "Forest Research Technician" and seven in "Forest RMT."

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[1] This policy can be found by searching the policy number or name in the search box of VIU's main page (www.viu.ca).
[2] Source: VIU Human Resources (HRIS snapshot of Forestry department faculty list taken January 12, 2012).

There is a mismatch between the credentials in the SRS and the course options offered by the department's webpage.[3] Additionally, the 102 active forestry students (students taking at least one Forestry course) are nearly double the number enrolled in one of the two official programs in the SRS 2010-11. The discrepancy likely accounts for the non-SRS programs offered by Forestry (e.g., bridging).

The Forestry faculty deliver curriculum in physical classrooms at the Nanaimo campus, although Forestry did offer courses in Cowichan in 2003-2004.

For the purposes of the surveys analyzed in this report, students in the program are defined as those who have registered in a Forestry program with a pre-defined course structure. An added check was used in the survey, asking students to self-identify their enrolment status in Forestry.

Below are the course offerings at VIU in the Forestry department, each of which was offered in a single intake at the Nanaimo campus in 2011-12.[4] Note that required English and Math courses are not listed as they are technically not provided by the department.

Table 1: First-Year Forestry Courses

Course
FRST 111: Forest Surveying
FRST 112: Forest Inventory
FRST 121: Spatial Data
FRST 131: Forest Botany
FRST 132: Forest Ecology I: Ecosystems and Sylvics
FRST 143: Forest Hydrology and Riparian Management
FRST 144: Forest Resource Administration
FRST 151: Forest Soils I
FRST 152: Forest Soils II
FRST 162: Fire Management
FRST 173: Field Skills

Table 2: Second-Year Forestry Courses

Course
FRST 201: Research and Communications
FRST 211: Forest Biometrics
FRST 212: Silviculture Assessment
FRST 231: Silviculture I
FRST 233: Silviculture II
FRST 234: Ecological Site Diagnosis
FRST 235: Forest Ecology II: Ecosystems and Management
FRST 242: Integrated Resource Management
FRST 261: Forest Harvesting Systems
FRST 262: Forest Harvest Planning
FRST 271: Forest Road Design
FRST 272: Forest Road Planning and Design
FRST 282: Information Technology
FRST 291: Interior Field Trip

Table 3: Third-Year Forestry Courses

Course
FRST 351: Forest Pathology
FRST 352: Forest Entomology

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[3] Information taken from Forestry department webpage.
[4] Course listings taken from Forestry department webpage.

PROGRAM REVIEW DATA SOURCES

The program Data and Analysis Report was written by the Office of Educational Planning based on the following sources of data:

- A survey of students (all Forestry students regardless of track). The student survey was designed and administered by the Office of Educational Planning in consultation with the program review chair.
- A focus group of Forestry faculty members and industry advisory group members based on the results of this report will follow, the results of which will be published as an appendix to this report.
- Program review survey results from other programs at VIU used for benchmarking program results against institutional averages.[5]
- Information researched, assembled, or written by the Office of Educational Planning, including analyses of enrolment, graduation, and student demographics.

Course outlines, faculty curricula vitae, summaries of departmental activities, and commentary or discussion of particular topics may be provided by the program under review.

Standardized surveys were used for each of the groups to be surveyed for the Forestry program review. All students received the same survey regardless of their stream (see Appendix C).

The student survey is mainly composed of questions common to all program reviews at VIU, with additional questions added covering topics of specific interest to Forestry faculty. The use of standardized questions allows the results from the Forestry program surveys to be benchmarked against similar programs at VIU, and against VIU as a whole.

Survey invitations were emailed to all Forestry students who had enrolled in a Forestry program between 2006-07 and the Fall Semester of 2011, and for whom we had

Forestry Student comments are blue

a valid email address. These invitations were followed by periodic reminders to those who

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[5] Non-degree reviews used for comparison to Forestry in this report provide the weighted average results of program reviews in Social Services, Child and Youth Care, Applied Business Technology, and Fisheries and Aquaculture. The overall VIU comparison numbers include all the non-degree program results, plus results from degree programs in Education, Biology, Liberal Studies, Anthropology, Fisheries and Aquaculture, Child and Youth Care, History, Creative Writing and Journalism, English, Women's Studies, Sociology, and Psychology, and from trades programs in Mechanical Trades, Carpentry, and Culinary.

did not complete their surveys. Each survey had numerous "comment" fields, where respondents were asked to provide comments on specific issues. Comments were coded into thematic categories. Summaries of common themes are reported throughout this document, along with examples to illustrate specific points. These comments are reported verbatim, except where grammar and spelling required clarification or where identifying information needed to be removed.

Many charts in this report show the percentage of students and faculty who "agreed" to a given question. To clarify, we use a five-point Likert scale, with these categories:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

For the purposes of this report, "agree" means a combination of "Agree" and "Strongly Agree." Respondents were allowed to skip questions, and so percentages are based only on those who answered the particular question.

The response rates for the students and faculty of the Forestry program surveys are presented in Table 4.

Table 4: Survey Response Rates

Survey	Completions	Sample	Response Rate	Start Date	End Date[6]
Faculty	Faculty Focus Group held in May 2012				
Students	86	160	54%	24 Nov 2011	12 Dec 2011

The student response rate is the highest response rate in the history of VIU program review.

Also note that a partially-completed survey (where at least one question is answered) constitutes a "completion" in Table 4; there were 84 student surveys where every question was answered or viewed by the respondent.

Table 5: Respondent Composition

Courses taken	Survey Completions
Diploma	72
One Year Forestry Bridging	8
Two Year Forestry Transfer	6

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[6] Start and end dates correspond to the first and last survey completion dates.

The diversity of the student body of the Forestry program, compared to student respondents, is outlined in Table 6.[7]

Table 6: Demographic Profile

Demographic	Subgroup	Survey[8]		Student Records[9]	VIU 2008-2009[10]
Gender	Female	23%		37	23%	56%
Aboriginal	Yes	2%		13	8%	11%
International	Yes	14%		20	13%	13%
Age Group (during student's last active semester)	17-21	30%		57	36%	Data not available
	22-24	29%		44	28%	
	25-35	35%		52	33%	
	36-50	7%		7	4%	
	Over 50	0%		0	0%	
	Average age	Data not available		24	27
	Lowest age			17	12
	Highest age			55	87
Campus (attended at least 50% of classes)	Nanaimo	100%		Data not available	Data not available
Employed while in program	Yes	46%			
Relocate to attend program	Yes	71%			
Enrolment status of survey respondents	Graduates	41%		Data not available	Data not available
	Currently Enrolled[11]	44%	1Y: 41%		
			2Y: 31%		
			T: 28%		
	Leavers	15%			
Family Status	Single, no children	60%			
	Single parent	2%			
	Couple, no children	30%			
	Couple with children	5%			
	Other	2%			

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[7] [S3; S128-S135]

[8] Note that the "survey" column represents 86 respondents, and that fewer than 86 answered each of these demographic questions.

[9] Forestry student sample taken from 26 October 2011 MIS extract.

[10] VIU 2010-11 data taken from 19 October 2011 CDW extract considering only students taking courses or programs leading to an approved VIU credential (i.e., excluding non-credential-only courses).

[11] Legeng: 1Y is first year at VIU; 2Y is second year at VIU; T is currently-enrolled students at another school.

One of the reasons for comparing the characteristics of those who answered the survey to characteristics of the population overall is to identify areas of possible survey bias. In this case, there is no significant difference in the gender, Aboriginal status or age status of survey respondents. It can be seen from this summary that student respondents to the Forestry survey were similar in proportion of international status and Aboriginal status, compared to the total population of Forestry students.

As a group, students in the Forestry program are mostly male. Three-quarters (76%) of Forestry students are male, compared to 44% at VIU overall. The average student age in Forestry (24) is very close to the university average of 27. There was a slightly lower percentage of Aboriginal students in the Forestry program than at VIU overall. Nearly one-half of Forestry students were employed while attending the Forestry program, and of those, 92% worked less than 20 hours per week. This corresponds to comments received throughout the survey referencing the heavy course load in the program.

MISSION AND GOALS

The Mission and Goals section covers fulfillment of learning objectives. The program's consistency with institutional mission and goals, and the program's consistency with similar programs at other universities are related areas which may be examined in the Self-Study report, but for which no survey questions were asked.

PROGRAM LEARNING OBJECTIVES

The specific policy question reads:

> *Does the program have clearly stated learning objectives and are these made clear to faculty and students?*

Students were asked whether the Forestry program objective "to develop foundational concepts, practical skills and critical thinking in order to promote success in a forestry-related career or post-graduate educational pursuit" was made clear to them, and most students (81%) agreed that it was.[12] Most students also agreed that the program did a good job of meeting its objective, as shown in Table 7.[13]

> **Technical note**: "Forestry in Context" tables compare Forestry's results on key issues with aggregated results from other degree program reviews, and with VIU overall program review results, meaning the weighted average results from every program review completed to date at VIU. Differences 17% or greater between Forestry and results from other program reviews are highlighted in colour.

Table 7: Forestry in Context: Program Performance

Question (agreement)	Students Agree	Comparison Group		Forestry in Relation
Program did a good job of meeting its primary objective.	86%	Non-degree	83%	**+3**
		VIU	82%	**+4**

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[12] [S36]
[13] [S35]

PROGRAM STRUCTURE, CURRICULUM AND DELIVERY

The student and faculty surveys capture a significant amount of information on the policy elements in this section.

CURRICULUM STRUCTURE AND CONTENT

The specific policy question reads:

> *Are program structure [and] curriculum designed to effectively achieve student learning objectives?*

Most students (82%) agreed that progression of challenge from lower to upper level courses was logical.[14] A higher percentage of students (91%) agreed that pre-requisite courses ensured that they were prepared for more advanced courses.[15] Agreement with this statement may be used as a proxy for cohesiveness of the department in determining curriculum, common classroom materials, and so forth. These results in particular suggest there are no major issues with the progression of courses from first to second year in Forestry.

Workload and Course Content Organization

The appropriateness of the workload for the Forestry program was measured by asking students whether "students' workload [amount of time spent both in and out of class, doing assignments and team projects] is challenging but manageable"; on a scale from "Too Easy Overall" to "About right" to "Too Challenging Overall." A majority of Forestry students felt that their program was too difficult overall.[16]

Chart 1: Program Challenging but Manageable

57% About Right
41%
2%
Too Easy
Too Difficult

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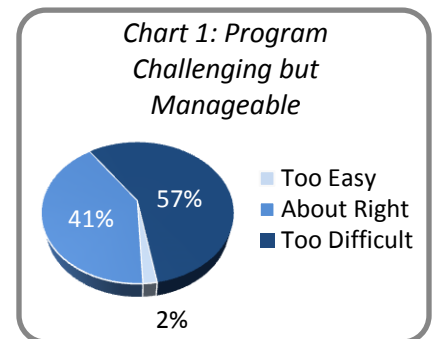
[14] [S51]
[15] [S52]
[16] [S42]

An analysis by student status (graduate, currently enrolled or leaver) shows that students who answered "too challenging" outnumber those who felt it was about right (see Chart 2).[17]

Chart 2: Program "Challenging but Manageable" by Enrolment Status

Enrolment Status	Too Easy	About Right	Too Challenging
Graduates		40%	61%
Current students	3%	43%	54%
Leavers	8%	39%	54%

> *Course content was great. Practical real life skills are learned. The content was taught in a very professional and well organized manner.*
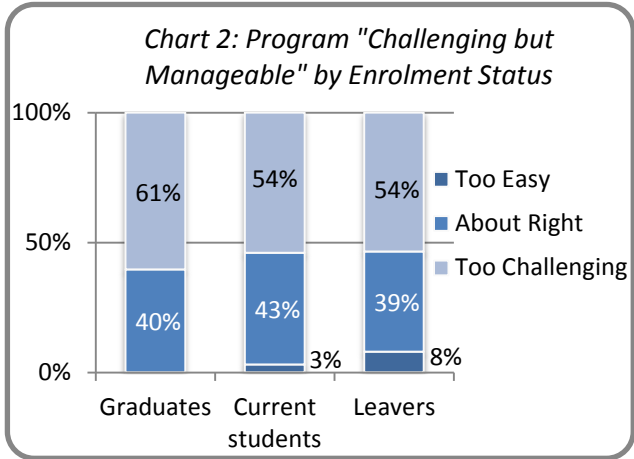
> *Workload could decrease by taking out non-essential assignments. Tedious time consuming assignments need to be re-evaluated. Teachers should ask themselves "is this assignment important to meet the objectives of the course"?*

> *Having the same students and instructors for the two years of the program, really helped foster a family atmosphere. Even as a mature student, I was often helped by other students to grasp what I was having difficulty with. Everyone worked very well together.*

> *Many courses have been streamlined so my comments on this issue are a bit moot, but I found at my time the course load was monstrous and, although do-able, I could have learned better had there been less info to cram into the old grey matter. I felt that the point of saturation was reached before each semester was finished, so eventually learning stops.*

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[17] [S42]

APPROPRIATENESS OF THE CURRICULUM

The specific policy item reads:

> *Is the level of the curriculum appropriate to the credential?*

Curriculum Content

Students were asked whether they felt that the course content was appropriate for a "university-level program,"[18] and 82% agreed that it was.

Students were also asked whether "all the required courses in my program were useful in helping me achieve the program objective" and generally agreed that they did.[19] Students were somewhat less positive on the organization of the curriculum.[20]

Students also agreed (83%) that "assignments were designed to promote a deeper understanding of the material."[21]

Chart 3: Content Appropriate for a University Program

- 60% Agree
- 22% Strongly Agree
- Strongly Agree
- Agree
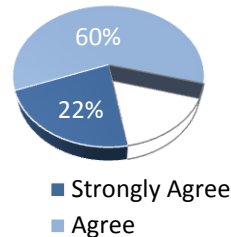
Chart 4: Required Courses Helped me Achieve Program Objective

- 49% Agree
- 27% Strongly Agree
- Strongly Agree
- Agree
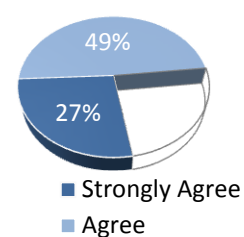
Chart 5: Curriculum was Well-Organized

- 53% Agree
- 13% Strongly Agree
- Strongly Agree
- Agree

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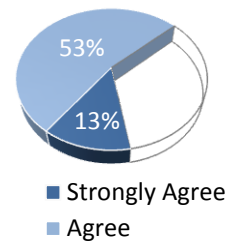
[18] [S44]
[19] [S46]
[20] [S45]
[21] [S40]

As shown in Table 8, students in other degree programs, and in VIU overall, feel similarly about their programs.[22]

Table 8: Forestry in Context: Program Performance

Question (agreement)	Students Agree	Comparison Group		Forestry in Relation
Program content was appropriate for university-level program	82%	Non-degree	79%	**+3**
		VIU	85%	**-3**

COURSE DELIVERY

The specific policy question reads:

Are modes of delivery designed to effectively achieve student learning objectives?

Most students (86%) agreed that methods of teaching, such as lectures, seminars and class discussions, were helpful in assisting them to learn effectively (see Chart 6).[23]

Chart 6: Methods of Teaching Were Helpful

55%
31%

■ Strongly Agree
■ Agree
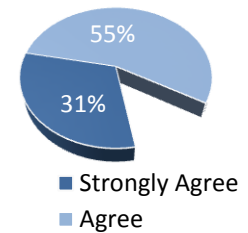
EVALUATION METHODS AND COURSE OUTLINES

The specific policy item reads:

Do student evaluation methods accurately and fairly reflect student performance and clearly assess what students are expected to learn?

Students agreed (80%) that evaluation methods in Forestry fairly reflected their performance.[24] The great majority of students (90%) also agreed that the course content, feedback, grading methods and delivery matched their course outlines, overall.[25]

Chart 7: Evaluation Methods Accurately Reflect Performance

55%
25%

■ Strongly Agree
■ Agree
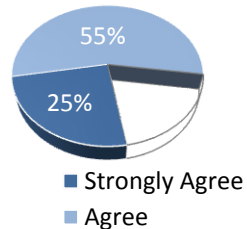
Chart 8: Course Outlines Accurately Reflect Course Content

63%
27%

■ Strongly Agree
■ Agree

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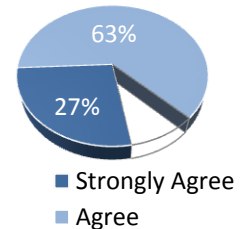
[22] [S44]
[23] [S35]
[24] [S39]
[25] [S32]

PROGRAM ADMISSION REQUIREMENTS

The specific policy item reads:

Are program admission requirements appropriate to program learning objectives?

The actual admission requirements to take the Forestry diploma program are:[26]

Chart 9: Admission Requirements were Reasonable

- Satisfaction of institutional admission requirements.
- English 12 with a minimum grade of "C."
- Principles of Mathematics 11 or Applications of Math 11 with minimum "C+" grade, or equivalent.
- One science 11 with minimum "C+" grade (Forestry 11 satisfies this requirement).
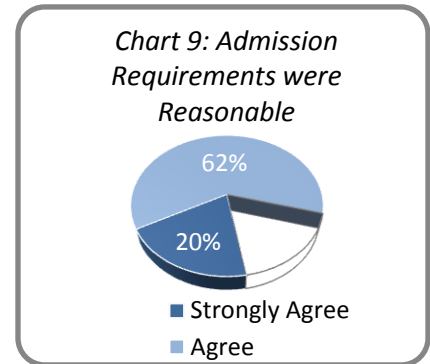
Most students (82%) agreed that the admission requirements for Forestry were sufficient to promote student success.[27]

PRACTICAL APPLICATION OF SKILLS

The specific policy item reads:

Are students provided with opportunities for the practical application of skills and knowledge, such as through experiential learning?

The most basic measure of practical application of skills is students' agreement with the statement, "I had sufficient opportunities within my program to practice the application of the skills I learned in the program."[28] Most students (85%) agreed that they had.

The student survey asked the extent to which students agree that the Forestry program helped them develop a number of general skills associated with a post-secondary education. For the most part, students in this program were more positive about the program's ability to teach them critical skills than were other students at VIU. These skills have been defined by the provincial government as those expected of all post-secondary programs in BC (see Table 9).[29] Forestry results exceeded those of VIU's non-

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[26] Taken from the Forestry department website.
[27] [S43]
[28] [S41]
[29] [S53-S62]

degree programs in eight out of ten categories, and exceeded the VIU average in every category.

Six of the skills in Table 9 achieved scores in the "strength" category, with more than 80% of students agreeing that their program taught them each of the following:

- Using mathematics or numeracy appropriate to the field.
- Reading and comprehending material appropriate to the field.
- Analyzing information and thinking critically.
- Working collaboratively with others.
- Thinking creatively and flexibly to solve problems.
- Independent learning.

Notably, skills involving use of math and numeracy exceeded the average scores of other program reviews by a wide margin.

The program has a very broad learning curriculum that helped me grasp my own learning techniques. I was able to dig into my memory and use math, writing and speaking skills I previously practiced, and creatively use them in a new way.

I am not a math person, I can memorize formulae and just stick numbers in to make things work, but I don't understand why it works. However, when applied practically things make sense. Learning how to use the formulae in a real-world situation (for example stocking surveys) really helped me make sense of it all.

I felt the program was good for allowing a bit of dabbling into many topics/aspects of forestry. It won't make you a master in anything, but it allows you to understand your strengths, weaknesses, and interests, so you can make a more informed decision regarding your career path.

There is an essential need for a greater push on technology in the program. I think there should be an extra GIS course with emphasis on using GPS data and importing it to create maps.

I find that the hand drafting work is "old fashioned" and generally an out of date technique.

Use of laser, GPS, and survey technology is critical in today's field work.

Use of GIS software and bringing in consultants to teach GPS mapping was critical to my education. [Instructor] telling the class that we "are technologists, [we] need to solve the problems" was an attitude changer for me. I've taken that to heart and use that mentality all the time.

The only score that substantially underperformed the VIU non-degree average was writing clearly and concisely.

Table 9: Forestry in Context: Skill Development Compared to Other Programs

Skill	Forestry	VIU Non-degree	Forestry in Relation
Using mathematics or numeracy appropriate to my field	89%	61%	**+28**
Reading and comprehending material appropriate to my field	88%	75%	**+13**
Analyzing information and thinking critically	87%	79%	**+8**
Working collaboratively with others	84%	77%	**+7**
Speaking effectively	68%	64%	**+4**
Thinking creatively and flexibly to solve problems	82%	79%	**+3**
Independent learning	83%	80%	**+3**
Resolving issues or problems	75%	74%	**+1**
Using technology hardware and software appropriate to my field	71%	71%	**--**
Writing clearly and concisely	63%	77%	**-14**
Skill	Forestry	VIU Overall	Forestry in Relation
Using mathematics or numeracy appropriate to my field	89%	51%	**+38**
Using technology hardware and software appropriate to my field	71%	61%	**+10**
Working collaboratively with others	84%	76%	**+8**
Resolving issues or problems	75%	67%	**+8**
Reading and comprehending material appropriate to my field	88%	81%	**+7**
Analyzing information and thinking critically	87%	81%	**+6**
Independent learning	83%	78%	**+5**
Thinking creatively and flexibly to solve problems	82%	78%	**+4**
Speaking effectively	68%	65%	**+3**
Writing clearly and concisely	63%	72%	**-9**

STUDENT ENROLMENT AND OUTCOMES

STUDENT RECRUITMENT

The specific policy item reads:

> *Are efforts to recruit students effective? Are student applications of sufficient number and quality?*

The student survey asked students to identify their most significant reasons for choosing the Forestry program at VIU.[30] The most often-mentioned reason for attending Forestry at VIU was because VIU is in the region where the student lives (49% of 86), while the reputation of the program was listed as a main factor by over one-third of students (37%).

Table 10: Significant Reasons for Choosing VIU

Source	%
It's in the region where I live	49%
Reputation of the program	37%
Small class sizes	36%
Unique aspects of program at VIU	30%
Reputation of VIU	17%
Program cost	16%
Program duration	15%
Other	24%

Technical note: Multiple-response question results are reported as the percentage of students who chose any given option; in this case, the 86 students who answered this question gave a total of 194 reasons for choosing the Forestry Program at VIU.

A small percentage of students (15% of 85) indicated that VIU was not their first choice of school, and some offered the names of their first choice institutions.[31] A similar percentage of students (11% of 84) indicated that they transferred to VIU from another school, of whom eight out of nine said they were satisfied or very satisfied.[32]

High amount of field time. VIU Woodlot. Wildfire Component. Two Words: [Instructor name].

I received positive feedback from former students in regards to the instructors.

I knew other people who had taken the program in the past and spoke highly of the experience.

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[30] [S4 (multiple response)]

[31] [S7]; other schools included BCIT (6) and seven miscellaneous others and comments.

[32] [S9, S10]

Discussions with forestry technician at the time [Instructor] and [Instructor] were very enthusiastic about the program, took the time to answer my questions and put me in touch with (at the time) current and past students. Both were very friendly and approachable, otherwise I would likely have not gone into the program.

The specific policy item reads:

Are student enrolment, retention, graduation rates, and time to completion, satisfactory?

Enrolment

This section will describe the enrolment trends and years to graduation in the Forestry program at VIU. Some definitions used are as follows:

- Headcount means an unduplicated count of individual people, regardless of how many courses they are taking in the Forestry program.
- FTE is a measure of volume based on what is considered a 100% course load for a student. An FTE is defined as "one full-time student in one program in one year." Part-time students would count for less than one FTE, while a student taking more than a 100% course load would count for more than one FTE.

The chart below shows the headcount of all students who took any Forestry class, by campus.[33]

Headcounts declined from a high in 2001-02 of 159 students, to a low of 58 in 2006-07. The numbers have generally increased since then.

Forestry Headcount vs. VIU, Year-to-year, 2001-02 to 2011-12

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
VIU*	159	147	146	152	151	143	144	146	142	136	
Cowichan Forestry Students			14								
Nanaimo Forestry Students	159	77	133	93	71	58	68	86	89	102	91
Total Active Forestry Students	159	77	147	93	71	58	68	86	89	102	91
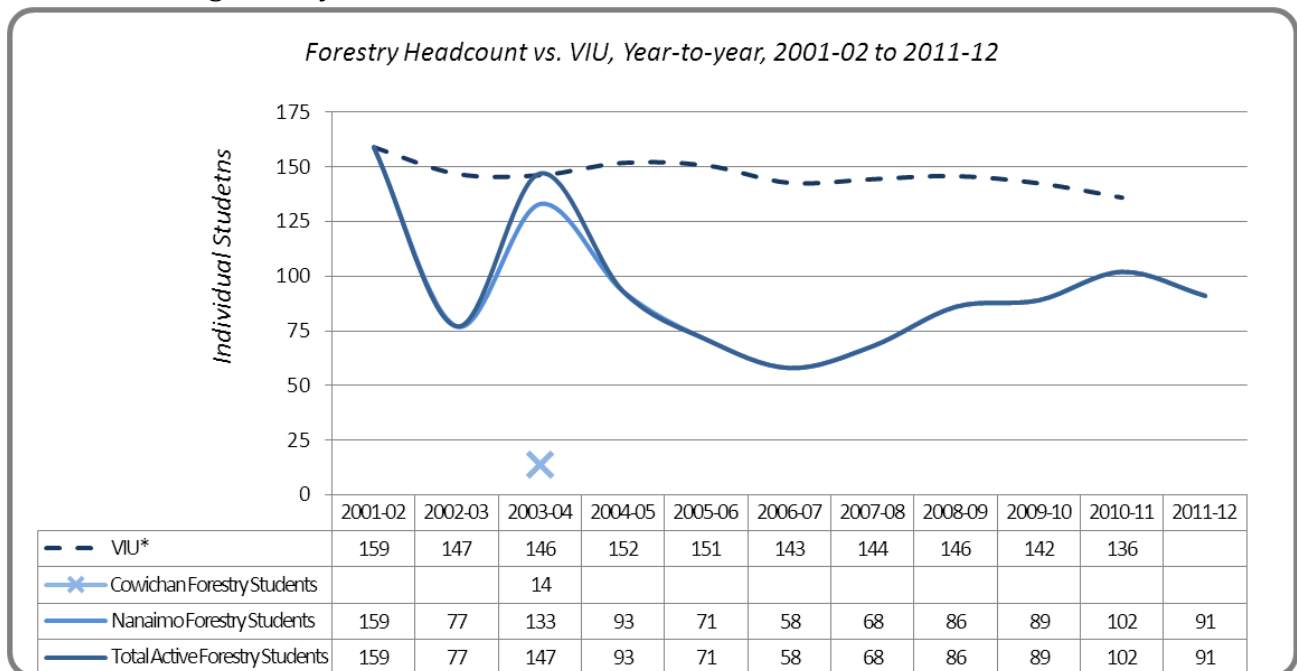
[33] Based on February 2, 2012 MIS Snapshot.

The FTE chart shows the volume of students by campus.[34] Assuming that a full course load for each student is 30 credits in an academic year, each Forestry student took an average of 2.8 three-credit Forestry courses in academic year 2001-02, which had increased to 3.7 in 2010-2011. Note that this number includes all students taking Forestry courses, regardless of their "official" program in the Student Records System.

The Nanaimo campus represented 100% of the Forestry FTEs in every year of the last decade except for one intake in Cowichan in 2003-04.

Forestry FTEs versus VIU, Year-to-year, 2001-02 to 2011-12

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
VIU*	45	45	46	47	49	47	48	52	55	53	
Cowichan Forestry FTEs			1.2								
Nanaimo Forestry FTEs	45.2	28.5	26.8	36.7	39.8	25.9	35.8	34.6	38.7	37.3	34.8
Total Active Forestry FTEs	45.2	28.5	27.9	36.7	39.8	25.9	35.8	34.6	38.7	37.3	34.8

Forestry Students by Credential, Year-to-year, 2001-02 to 2011-12

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Active Forest Research Technician Students	20	23	33	44	48	30	41	43	51	48	46
Total Forest Research Technican Graduates		9	8	9	18	11	13	12	16	8	
Active Forest RMT Students							1	5	7	7	7
Total Active Forestry Students	20	23	33	44	48	30	42	48	58	55	53

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[34] Based on February 2, 2012 MIS Snapshot. Academic Year: September 1 to August 31.

Graduation rates for the Forestry Research Technician (FRT) program are calculated subject to some assumptions.[35] If a student entered his or her first year in 2005-06 (year one), and then graduated in 2006-07 (year two), it could be said that they took two years to graduate from the time at which they entered their program *with a Forestry Research Technician diploma*. If students do not apply to graduate, they would not appear as graduates in the data. If students went on to graduate in another program (e.g., BSc.), they would appear in that program's graduation statistics. Table 11 does not show all the students who completed all the requirements to graduate; it is a table of actual registered graduations from the FRT program.

2001-2010	Percentage
Two years	41%
Four years	61%
Six years	61%

Retention

Chart 10 shows the distribution of respondents in relation to their current program completion status.[36] The 13 leavers who completed the survey gave different reasons for leaving:[37]

- Changed mind about career goal (4)
- Personal circumstances (3)
- Disappointed with the program (3)
- Finances (1)
- Decided to go work (1)
- Other reason not listed (1)

Chart 10: Forestry Student Respondent Profile

Graduates (35)
Current (38)
Leavers (13)

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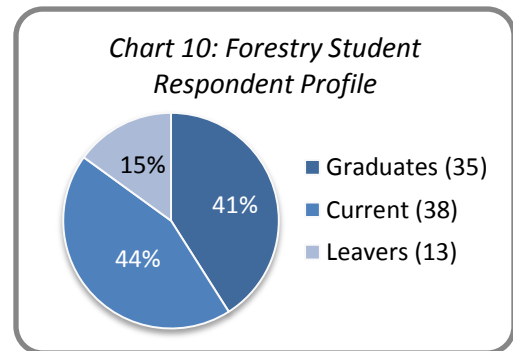
[35] FRT graduation rates were the only program in Forestry for which this data was available.
[36] [S2, S11]
[37] [S12]

The specific policy items read:

> *Are graduates successful in getting jobs and, if so, does the program prepare them well for their jobs?*
> *Is the program relevant to the field of practice?*

Just under one-half of forestry students (45%) had a particular career goal in mind when they chose to take the Forestry program.[38] Ho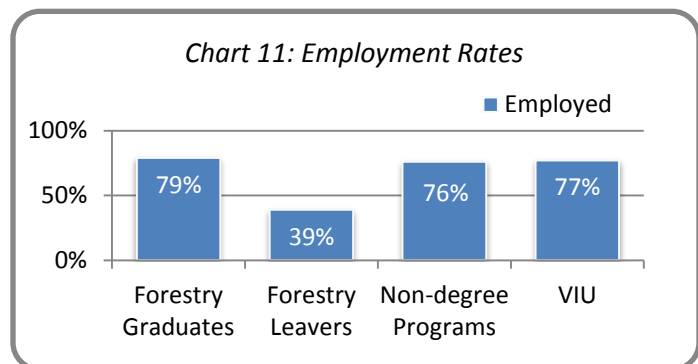wever, this number does not take into account those students who were interested in a general career in Forestry, without necessarily having a particular job goal.

Table 12: Employment: Graduates and Leavers

Job	Number	Percent
Forestry-related job	21	66%
Non-forestry related job	11	34%

Leavers and graduates were asked whether they were currently employed, and what their jobs were.[39] Of graduates and leavers, 68% were working at the time of the survey.[40] Table 12 shows the split of students working in (or outside of) the forestry industry.[41] (Current students were not asked for this information, as the purpose of this question was to gauge post-program employment outcomes.) Of the Forestry graduates and leavers who were employed, all 28 provided their job titles and supporting information about their job duties and their industries of work. Examples of non-forestry job

Chart 11: Employment Rates

■ Employed

- Forestry Graduates: 79%
- Forestry Leavers: 39%
- Non-degree Programs: 76%
- VIU: 77%

Table 13: Forestry in Context: Finding and Performing a Job

Question (agreement)	Forestry	Comparison Group		Forestry in Relation
Program useful in finding job	78%	Non-degree	67%	+11
		VIU	63%	+15
Program useful in performing job	81%	Non-degree	68%	+13
		VIU	68%	+13

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[38] [S23]
[39] [S23]
[40] [S25]
[41] [S26 (multiple response)]; note that to qualify as a "forestry-related job," the student had to make some mention of the forestry in their job title, job duties or industry worked.

titles included Employment Assistance Worker, Assistant Store Manager, ESOL Teacher, Naval Officer, and Field Geologist.

Table 13 shows the relative employment outcomes of degree programs, and of VIU as a whole.[42]

Students were positive about the usefulness of their program in helping to get and perform a job. Forestry program students' agreement for both of these questions was noticeably higher than agreement of students in other non-degree programs, or in the overall university.

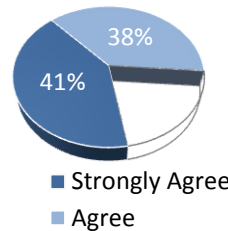Chart 12: Forestry Useful for Getting a Job

38%
41%

■ Strongly Agree
■ Agree

Chart 13: Forestry Useful for Performing a Job

44%
38%

■ Strongly Agree
■ Agree
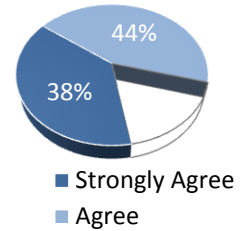
The hands on technical skills I have acquired through the VIU Forestry program come into use every day I am on the job. Skills that make me an asset to the team both in the field and the office.

I already had many skills that I developed over the many years working in the industry. The program allowed me to develop my communication and research skills which subsequently helped me to attain a better position.

I was able to perform all responsibilities related to my position in a very short time frame. I was the first person from this program to gain employment from this company and since then this company has specifically looked for people in this program.

I was ahead of the other new hires in various engineering data collection procedures, map reading, using and understanding road engineering, and silviculture survey procedures.

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[42] [S29, S30 and data from previous program reviews]

The program and especially the summer job experience have helped me with my 1st employment as I was hired back by the same company I worked for the summer upon my completion of the program. Having a diploma is an important point on a resume; however experience/training gained throughout the years I have worked in the industry has become more substantial and critical. I have moved on to a different aspect of forestry, which handles more logging operations and sawmilling. When I first started this position, I had limited knowledge and experience in wood business, as my expertise only came from being a forest technician, who only did layouts and surveys. I strongly feel the forestry program has given me a kick start to get into the industry. However, I can't help but conclude that in this diverse forest industry, the program is setup only to help students get a 1st job, not to develop further... So, in a nutshell, the program had done a great job with my employability for my 1st job.

The skills I learned in the forestry program definitely proved useful in obtaining and keeping a job in the forest industry. I feel that the program could focus more on riparian issues and GPS surveying as a marketable skill for graduates. That being said, I used my hand traversing skills extensively in my summer job. I feel the skills that I got from the program surely made my employable and have a direct connection to the work I am doing now. I also got other civic positions with the forestry diploma.

I am not working because I am still a full time student, but because of the forestry program at VIU, I can get a job whenever I need one. I have a myriad of skills from that program that employers find very attractive including Fire Suppression, GPS, Earth Science, and many others. That part of my education is invaluable in my opinion.

Field skills, including navigation, sampling fundamentals, surveying fundamentals, map use, ability to read the forest to move around efficiently, road building increased my knowledge of logging road navigation and driving, machine operation and cost to operate, stream sampling and surveying. Vegetation identification. Soil sampling and descriptions. Pretty much everything!

Students were asked whether they got a forestry-related summer job while attending Forestry at VIU.[43] This question was asked in light of extensive department efforts to find practical summer employment for students in the interval between first and

Table 14: Summer Jobs

Attribute	Students Agree
Did you get a forestry-related summer job?	84% Yes
The Forestry department actively supported students to get a summer job.	95%
My first year in Forestry prepared me for my summer job.	75%

second year. Eighty-four percent of VIU Forestry students obtained forestry-related summer employment.[44]

FURTHER EDUCATION

The specific policy item reads:

> *Do graduates continue on to further education and, if so, does the program prepare them well for further studies?*

About one-quarter (24%) of Forestry students built on their VIU education with a Forestry-related program elsewhere after leaving VIU.[45] Of those students, all twelve had either graduated (3) or were still enrolled (9).[46] Of those students, eleven out of twelve said that the VIU Forestry program prepared them well or very well for their subsequent education.[47] No students answered "poorly" or "very poorly."

Chart 14: How Well Did Forestry Prepare You For Future Studies?

50%

42%
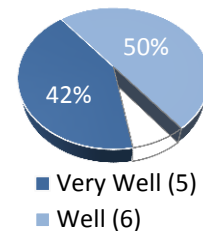
■ Very Well (5)
■ Well (6)

> *The program at VIU went beyond all requirements and training for the program here in [province]. It had a much larger scope of in depth knowledge and professionalism.*

> *Prepared me very well for logging operation and hydrology courses. The VIU program gives transfer students more practical knowledge. The program did not prepare me well for wildlife classes which spent more attention on wildlife survey techniques.*

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[43] [S20]
[44] [S21, S22]fs
[45] [S14]
[46] [S17]
[47] [S18]

STUDENT EXPERIENCE AND LEARNING ENVIRONMENT

The topic of student experience is at the centre of the program review. This section explores questions on overall student satisfaction, learning environment and experience, student engagement, and faculty-student communication.

STUDENT SATISFACTION

The specific policy item reads:

Are students satisfied with their educational experience?

This report uses two constructs to determine overall student satisfaction.

Under the header of *Satisfaction with the Forestry Program*:

- Strengths and weaknesses of the Forestry program.
- Quality of instruction.
- Willingness to recommend the program.

In addition, overall satisfaction with VIU is explored.

SATISFACTION WITH THE FORESTRY PROGRAM

Program Strengths

According to students, the top strength of the Forestry program according to students was its instructors, although many students expressed appreciation for the practical usefulness of the program, the learning environment, and the small class sizes.

Table 15: Top Strengths the Forestry Program

Strength	%
Instructors	50%
Practical/hands-on/career prospects	37%
Outdoor learning environment	20%
Small class sizes/individual attention	16%
Other strengths	12%
Other comments	3%

Teaching students in the field. Current employer noted that the program gave me an advantage compared to university students by teaching me more practical skills.

The instructors are the cornerstone with direct experience and are very accommodating to student's needs - this makes this program that much better.

The instructors' willingness and creativity to deliver the material to students. Students' sense of accomplishment and well-being, employability after the program, knowledge base gained, professionalism.

The accessibility to the faculty. They were available any time I needed them and they were always willing to help us directly or point us in the right direction.

Small classes, everybody knows each other, sense of comfort. The field exercises are close by, and we get to go on many field trips.

The top "weakness" of the program expressed by students was difficulty handling the workload in the program. This issue presupposes that students had not been informed of the time and effort required of the Forestry curriculum, prior to their entry in the program. This suggests that this message (that Forestry is a major and intensive commitment of effort) has been under-communicated by the department in general in the past five years.

The topic of "non-relevant or missing technology" was usually a comment from students in the workplace, who discovered he or she was untrained in the use of technology required by that job. However, this issue is heavily outweighed by student comments in the "greatest strength" section regarding how useful the training has been for them.

Table 16 demonstrates some dissatisfaction around the supplies required by and transportation provided by the department.[48]

Table 15: Top Weaknesses of Forestry Program

Weakness	%
Workload too intense/difficult	34%
Issues with instruction/communication style	22%
Non-relevant/missing technology	20%
Issues with classroom facilities	10%
Positive comments/no weaknesses	7%
Perceived underfunding by VIU	4%
Other weakness	15%

Technology resources... would be nice if there was some use of GPS, as it is very common in the field, and some class time devoted to practical skills for GPS'ing in the field (we were taught how GPS works, but not how to best use it in a hands on, industry practical application).

It would have been nice if any discount deals were applied to gears. Or, the information about the cost for equipment and $300 deposit should have been posted in the forestry website.

Table 16: Equipment and Facilities Specific to Forestry

Attribute	Students Agree
The facilities and equipment outside the classroom in my department are satisfactory.	79%
Transportation arrangements are satisfactory for off-campus field labs.	54%
The additional costs for the program are good value for money spent (e.g., books, equipment, first aid training etc.)	57%

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[48] [S66-S68]

Required textbooks because we need required textbooks is ludicrous. I don't know how many hundreds of dollars I spent for that sole reason, and never cracked the spine. I was a good student, but didn't have the time to read books in 'spare' time because there was no spare time. I learned by the last semester to not buy books until the second week of school when I realized which textbooks we actually needed. Forestry is ever changing, and some classes are unreasonable to have a textbook. I realize that was an institutional rule, to have a textbook for the sake of having a textbook. Buying hundreds of dollars of needless textbooks every semester was killer on my piddly budget of a student loan. I would definitely change that, for sure, as soon as possible.

For many people coming into forestry for the first time, it would have been good to have more advice on what kind/styles of field gear to purchase... i.e.: what type of boots are better than others, same for cruising vests... Would be nice to have the faculty explain what the possible options are, sure some will be more expensive, but the extra quality will be worth it. I ended up buying boots and a vest that I won't use outside of school as I needed better quality for actual work (which was a waste of some $300). Would be nice to get a bit of detailed advice, instead of "Just go buy boots and a vest."

Many of the texts we use sparingly or not at all, but that is not to say we are not learning their contents, we are picking them up in lectures etc. More use of online resources would be good to help cut costs to students at the outset. The bus to get to the woodlot also seems to sometimes be 2 or 3 people short of seats so someone has to bring their car, and if they are going into the woodlot, it needs to be a student with a 4X4 willing to take it onto the logging road.

Classes and provided equipment are good. The book costs are a bit high, considering many books were not used (please see these for sale at the student union book swap!) - or only used as a supplement if we wanted to. If a book is required it should be used and useful (like the green book).

Two key measures of instruction are used in the student survey, as shown by Table 17. The Forestry department's "score" for overall quality of instruction was high at 85%: this is higher than other non-degree programs at VIU, and higher than the institutional average (both 83%).[49]

Table 17: Student Opinion of Instruction

Attribute	Forestry	Comparison Group		Forestry in Relation
Quality of instruction was good overall.	85%	Non-degree	83%	**+2**
		VIU	83%	**+2**
Faculty were knowledgeable in their fields of expertise.	91%			

In a two year technical program, the technical skills are the backbone for the learning. While learning these technical skills, I feel a lot more attention could be made to the legislative side, not only in terms of how it works, but possibly hands on assignments on developing cutting permits etc., for different licenses; not enough attention was given to the practice of the legislative skills). From what I know, the curriculum changed extensively since I graduated from Malaspina (for the better) in terms of better preparing students for careers in forestry. Some of the teaching methods were a bit out dated when I attended (from certain faculty - now retired) but it was definitely enough to give me a taste of what my career would be like.

I distinctly remember being told that it doesn't matter what we write for instructor reviews because "we got tenure." This environment breeds mediocrity and it's not fair to the students. Also, the lack of communication between faculty was bordering on the ridiculous, there were weeks on end of doing nothing but homework because the assignments just kept getting piled on and there were days with multiple exams/assignments/presentations/labs all on the same day!

Overall the teaching and material was good, however there was a lot of it and sometimes things were disorganized. Having multiple teachers in one class is not effective (they don't collaborate and hearing "i don't know what so-and-so taught you last week, but...." is not appreciated). Also, some instructors are more effective than others at explaining what they want from students.

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[49] [S34, S37]

The entire faculty was very knowledgably in their fields. Many went out of their way to make a good experience for us.

The instructors are very knowledgeable and keen to teach. We had a first year English class that would have been nice if it was tailored to forestry (it was not at all, i.e.: different writing format than what is used in forestry articles/journals etc.).

Amount of field work was good. It was beneficial to have instructors share their personal experience and knowledge even if it wasn't directly related to the course they were teaching.

Some teachers seemed to be unfamiliar with the material that they were discussing or seemed to have lost their passion for the subject. However there were some instructors that were very good at discussing the information making the material very interesting and easy to learn.

The faculty were knowledgeable, enthusiastic, hardworking, and friendly. They were always prepared to go the extra mile and put themselves out to help us. I cannot thank them enough for their hard work.

Hard to assess at this point as I have only had one semester to assess, plus the program has been shuffled around this year and new courses added (hydrology) so it is apparent that the course is adjusting and teachers are getting their sea legs so to speak. Some courses seem apparent as more solid than others.

The current forestry faculty is comprised of very helpful, dedicated and selfless individuals. They really do a great job.

Professors should undergo student reviews. Even the best instructors can improve. A professor should not be protected by their union when it comes to keeping their job. Students pay too much for instructors who choose not to feel the need to improve.

Teachers were extremely knowledgeable in their fields. Very helpful and always an e-mail away for questions. Well organized lessons (with a few exceptions) and great hands on labs.

For the most part, expectations were well communicated. However in the cases where this wasn't outlined from the onset, the faculty were always available to clarify and point me in the right direction. I also believe that although the course did not point us in any specific career path, it was able to give me a glimpse of the variety of career paths within forestry.

Certain instructors were excellent and others were lacking in enthusiasm. Students responded to a higher energy level of instruction, and if a mutual respect could form between student and teacher then course outcomes were met and surpassed.

Willingness to Recommend Program to Others

A key measure of the program's impact on students is the question asking whether students would recommend their program to others. A great majority of Forestry students (86% of 83) agreed that they would.[50] Forestry students were more positive than average about whether they would recommend their program to others, and this is reinforced by a number of open-ended comments.[51] Chart 15 shows a breakdown of comment themes made by students, split by their willingness. The 86% of students who agreed that they would recommend the program is reflected in the dark blue-shaded bars in Chart 15.

Table 18: Forestry in Context: Program Recommendation

Question (agreement)	Forestry	Comparison Group		Forestry in Relation
I would recommend this program to others.	86%	Non-degree	82%	**+4**
		VIU	81%	**+5**

Chart 15: Comments by Willingness to Recommend the Program

	Positive comments: instructors	Positive comments: program content	Positive comments: job prospects	Positive comments: making friends	Issues: job prospects	Issues: other
Would not recommend	0	1	0	0	1	3
Neutral	0	1	1	0	3	0
Would recommend	11	20	10	3	2	2

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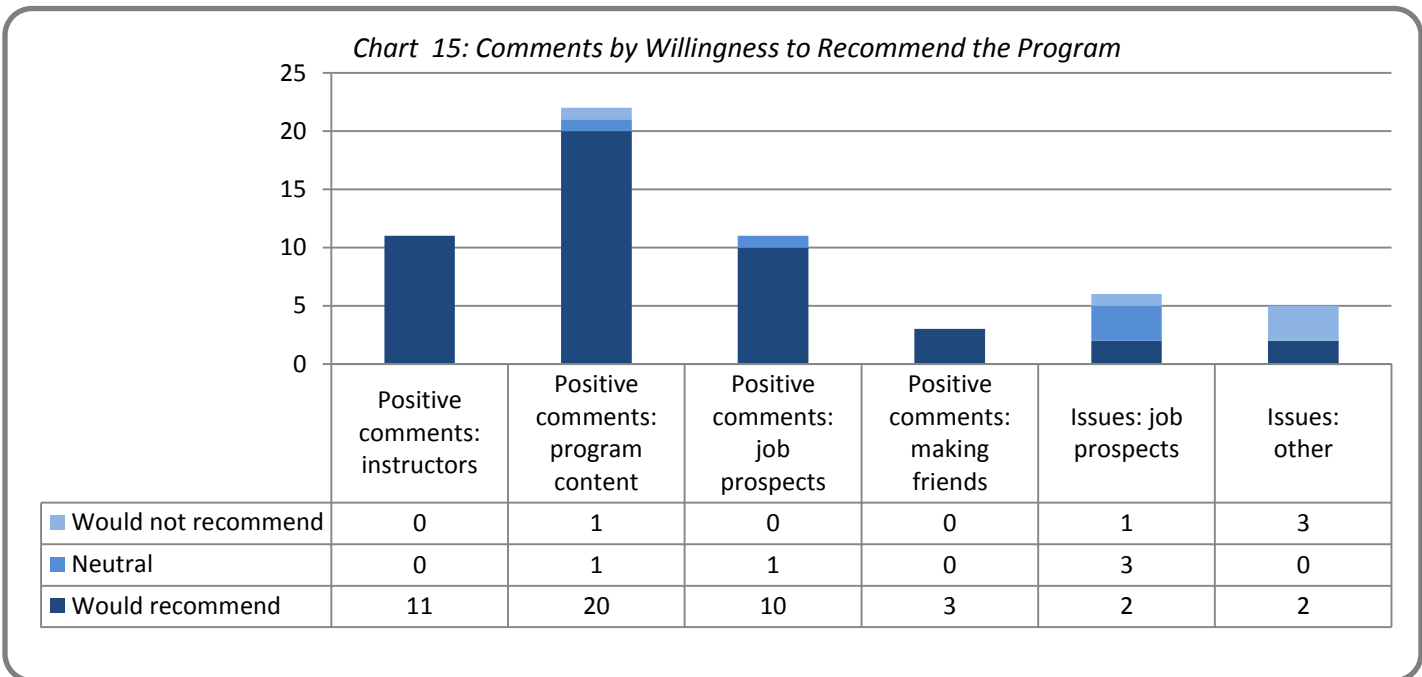
[50] [S70]
[51] [S71]

The program is decent, but I do feel it is a bit of a waste of time and effort for the end job opportunities/salary. When I signed up for forestry, the program website had these promises of high salary, lots of job availability, and great work environments and lifestyle. What I found when I entered the job market it was pretty bad, no job security, long hours/extremely low pay for the amount of specialized post-secondary education, and most people scraping by hoping for the industry to "pick up" again. We also learned about lots of different interesting topics but the majority of the time you are just a pair of legs walking through the bush with a clino or plot cord. Investing two years of your life for that reward is pretty disheartening when you could have gone through various other 2 year tech diplomas with less effort and higher payoff. I just feel the role of RFT is useless, too much training to be a grunt, not enough training to be allowed to manage forests.

This program is eye-opening, informative, and a great program for people interested in the industry. I doubt I will ever have regret for enrolling in the program. I tell people how great it is and how great the staff is, yet I am sure to inform them how difficult it is. Teachers: do "not" tell your students that the next semester will be easier, that the next year will be easier. I ended up driving myself into the ground the first semester, staying late after class, working until 1 or 3am nightly doing homework, and isolating myself from a social life on the sole premise that "it gets easier." My grades went from an A average and significantly dropped early the next semester, and it took the whole second semester to crawl up to a B/B- average. You develop a understanding so you catch on a little faster and the second year has less courses, but each semester what we learn gets more complex which maintains the level of difficulty. So it doesn't get easier (a little easier in second year).

I have shared my VIU Forestry program experiences with other Forestry students from BC, Alberta and Ontario, and feel that the VIU program; is too "Coastal" specific (the course should have more information about forestry in other Canadian regions including BC), work/study hours spent outside the class room seemed to be considerably more than any other program, technology/equipment and a few courses seem to be outdated and irrelevant, and the course seemed to be a bit of a juggling act between new instructors and classes. Aside from the Forestry program, the VIU strike really killed the whole educational experience.

Some Instructors didn't like the others, making it clear to the class, which is very unprofessional; forcing students into driving their own vehicles without recompense; the amount of time that was spent sitting in class, not doing; MOST disappointing was the complete lack of courses or even parts of courses focused on wildlife, fisheries, or First Nations culture, treaties, or involvement in forestry. To not even touch on First Nations in a forestry program in a time when treaties with large tracts of land included in them are going through is shortsighted and embarrassing, especially at an institution with a huge FNAT program.

I think this program delivers relevant skills and knowledge to what someone would be using out in the forestry industry. I think that it is so interesting and that anyone who likes the outdoors and likes plants and the environment should definitely look into this as a career. It is challenging academically for the most part and I do think that it is a program that anyone can get through if they do all the things that is necessary to succeed.

A wealth of forestry specific courses encompassed into two years. The ability after this short time period to be able to enter the industry and start a career. By being exposed to many different subjects gives students an insight into which area of forestry they might like to concentrate on. With the professors having a great depth of knowledge in their respective fields, this makes the learning experience interesting and challenging.

In terms of the job it's great, but the industry is volatile. Since graduation I've been employed the majority of the time. In 2008 when the market crashed I couldn't find work. That time was a struggle. Other than working in isolation and camps I recommend this job to most, but as a family man being a way from family is a struggle, I try to let anyone I know other issues with the industry other than the daily "job."

Overall a good experience and I have heard that it has gotten better with the new (streamlined) format. Teachers, even the curmudgeonly ones, really are lovely.

Even if there are no jobs, the skills are very highly transferrable to any natural resource or field job. Nearly everywhere I go, I have the most field skills, all due to the forestry program. The skills learned are an extremely valuable asset to have in any field job, from biology to mining.

Based on the knowledge and dedication of the current instructors, I would and have recommended the program to others.

I would highly recommend the program. Overall the value of the program is with the instructors - they're a great group of people with loads of experience. Best of all, they are very accommodating to student's needs - this makes this program that much better.

The program is fun, challenging, will equip you with a lot of useful skills, and will afford you the opportunity to make lifelong friends.

This program takes personal understanding and being to a new level. I came from the program with an understanding way above many other forestry students from similar programs, and as such, was immediately employed.

The program did an excellent job in preparing me for my forestry experience and offered supporting courses that will prepare students for related careers.

Students were asked a number of questions to gauge their overall satisfaction with their educational experience at VIU.[52] Overall satisfaction among Forestry students was high (see Chart 16) though slightly lower than other degree programs, and was lower compared VIU overall (see Table 19).
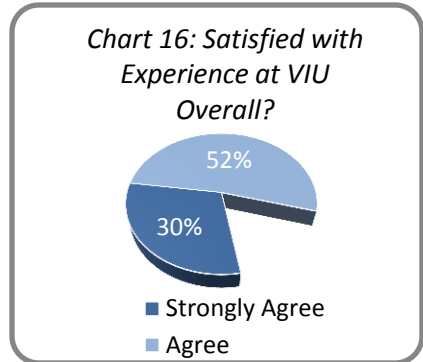

Chart 16: Satisfied with Experience at VIU Overall?

52%
30%

■ Strongly Agree
■ Agree

Table 19: Forestry in Context: Overall Satisfaction

Question (agreement)	Forestry	Comparison Group		Forestry in Relation
Overall, I am satisfied with my experience at Vancouver Island University.	82%	Non-degree	89%	**-7**
		VIU	90%	**-8**

For the purposes of this report, analysis was conducted to determine if there was any variation in overall satisfaction with the program by age, family status, relocation status, employment status, and variable hours of work while in the program.[53] Additional preliminary analysis was done by Aboriginal status, gender, transfer status, and international status, but the distribution of students in these groups was too unbalanced to produce meaningful results.[54]

Some disparities in satisfaction were revealed in the valid cross analysis:

- There were some differences in overall satisfaction by age, which ranged from 67% satisfied for the 35+ group to 92% satisfied for the 17-24 group (see Chart 17).[55]

- There was some variation in overall

Chart 17: Overall Satisfaction by Age Group

100%
92%   75%   83%   67%
50%
0%
17-21   22-24   25-35   36-50

■ Agree

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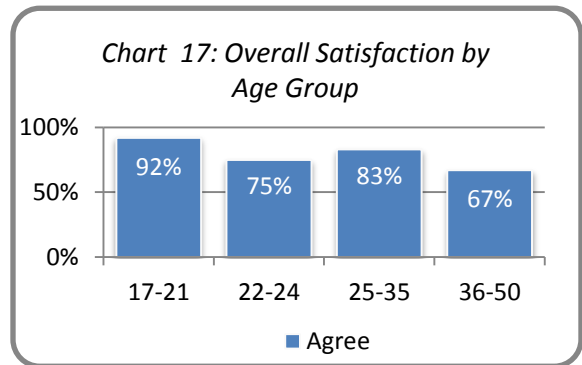
[52] [S126]
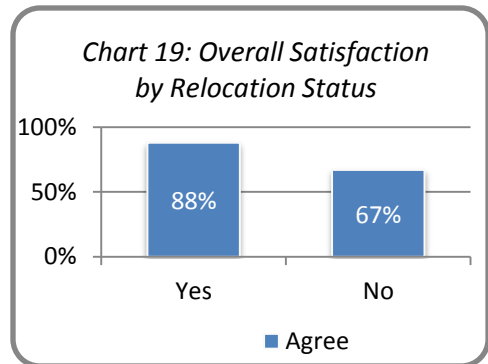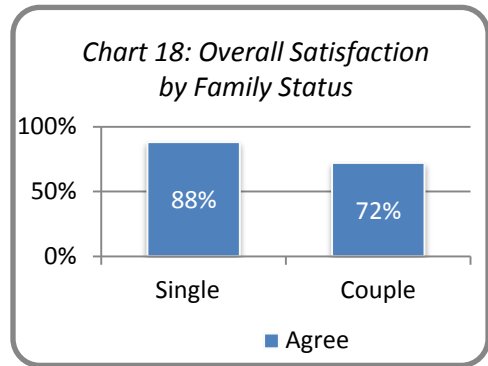
[53] [S129, S131, S132, S134, S135]

[54] [S130, S128, S8, S133]

[55] Note that the 36-50 age group contains only six respondents; this number is not large enough to draw conclusions.

satisfaction by family status, as shown in Chart 18; students who were single registered higher satisfaction than "couples."

- Students who relocated to attend the program were more satisfied than students who did not relocate (88% versus 67%).

- Satisfaction with the program did not vary significantly based on how much time students were working while in school, nor were any patterns noticed based on amount worked over the long term or by general hours worked. However, it was observed that a very small percentage of students worked more than 20 hours per week while in the program.

Students also provided open-ended comments to respond to the question "How could the overall experience at VIU be improved?"[56] These comments covered a variety of topics, as shown below.

Chart 18: Overall Satisfaction by Family Status

Single	88%
Couple	72%

■ Agree

Chart 19: Overall Satisfaction by Relocation Status

Yes	88%
No	67%

■ Agree

> *Teachers: don't go on strike when you have no chance of success and will have to settle with less than you had before. Administration: stop paying yourself so much money, you don't do enough to earn it, this school needs improvement, so take that money back out of your paycheck and improve the school. You're still a University-college; don't think that means you get to be paid like you run a big university.*

> *I felt a strong sense of community at VIU; however it was not with the university itself, but the Forestry program. In general I did not feel like I was a part of VIU, I was a part of the Forestry Program. Immediately after attending VIU I was proud of attending; however after the strike I am less likely to promote the University as a whole because the students are not the focus of many of the faculty members. I have the impression that the students are merely bargaining chips, pawns of the professors to increase pay and reduce workload. It's actually rather embarrassing to think of the university I attended to have this attitude. I also believe that more is needed to promote the technical aspects of VIU. In the majority of job interviews I have had, the name VIU is virtually unknown as its location. Once I refer to it as Malaspina it is instantly recognized and respected.*

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[56] [S127 (multiple response)]

More of a meeting place, study area, food options at the central part of the campus, rather than just a cafeteria with limited opening hours. For after-hours study more needs to be done for the students on campus.

I know times are tough, but taking the difference out of student's pockets is very slimy thing to do. We know money is an issue, but it's not ours to remedy with our tuition fees. We are here to learn, not to be leveraged. The administration is greedy and so is the province. When we are done studying, we are coming to clean house...

By providing longer hours for most facilities students enjoy. For example the cafeteria should be opened for longer hours. There should be more computers available in the library for students to use.

I don't know, but wanted to add that I am proud to be in the forestry program, but do not feel that pride transfers across the whole school in general.

By providing longer hours for most facilities students enjoy. For example the cafeteria should be opened for longer hours. There should be more computers available in the library for students to use.

I don't know, but wanted to add that I am proud to be in the forestry program, but do not feel that pride transfers across the whole school in general.

By providing longer hours for most facilities students enjoy. For example the cafeteria should be opened for longer hours. There should be more computers available in the library for students to use.

The specific policy item reads:

> *Are the learning environment and educational experience provided to students (both inside and outside the classroom) of good quality?*

Student Pride about Attending VIU

Regarding the issue of "pride about attending VIU"[57], just over one-half of Forestry students (55%) agreed or strongly agreed that they feel a "sense of pride" about attending VIU.
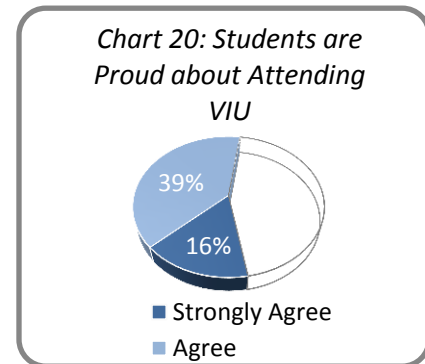
Institutional Learning Environment

Three questions were asked of Forestry students on the institutional learning experience for students (see Table 20). Nearly all Forestry students (91%) agreed that VIU offered them opportunities for intellectual and personal growth. In contrast, relatively few students agreed that VIU is student-centred.[58]

Chart 20: Students are Proud about Attending VIU

39%

16%

■ Strongly Agree
■ Agree

Table 20: VIU Learning Environment

Attribute	Students Agree	
Experienced intellectual/personal growth	91%	
Administrative staff are helpful, friendly, and responsive	75%	
VIU is student-centered	58%	

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57 [S123]
58 [S117, S122, S125]

Forestry students were asked to provide their satisfaction with two constructs relating to their classroom experience, as shown in Charts 21 and 22.[59] Students were more satisfied with their classrooms than they were with the classroom technology.
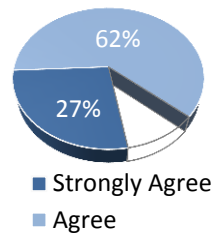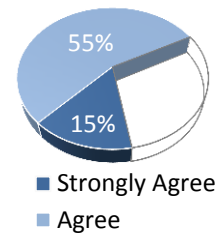

Chart 21: Classrooms Were Satisfactory

62%
27%
■ Strongly Agree
■ Agree

Chart 22: Classroom Technology was Satisfactory

55%
15%
■ Strongly Agree
■ Agree

Student learning environment and educational experience were also measured by asking students to rate their satisfaction with many campus services, and by asking students to gauge the importance of those campus services to them.[60] Although these campus services are common to most, if not all students, the results can be used for several purposes:

- Understanding what services are important to and appreciated by Forestry program students
- Understanding what services students in the program do not care about or are unhappy about
- Possible drivers of student satisfaction and assets of VIU to be used in recruitment

Nanaimo-only campus results are detailed in the following table. These two variables (satisfaction and importance) were combined to determine whether a campus service was a particular strength or weakness; high importance and high satisfaction is a strength, while high importance and low satisfaction is a weakness.

Strengths and weaknesses cross satisfaction with high importance. However, the student survey also collected information on high satisfaction and low importance. When satisfaction was high, but importance was low, this was considered a "bonus"; nice to have, but not important. Conversely, if satisfaction and importance were both low, it may represent an issue to watch, but for now it is an issue that requires no urgent action.
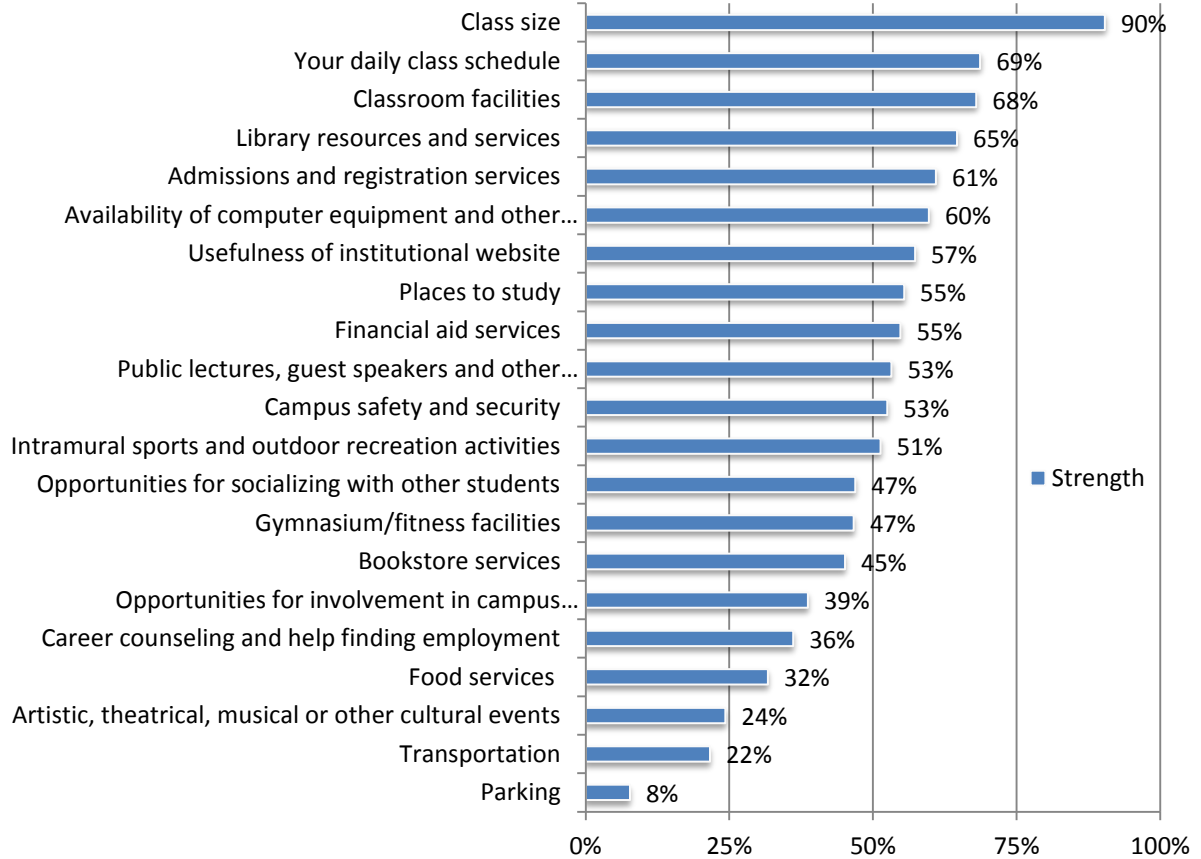
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[59] [S64, S65]
[60] [S74-S115]

Table 21: Forestry Students: Institutional Strengths and Weaknesses

		Satisfaction	
		High	Low
Importance	High	**Strengths**	**Weaknesses**
		• Class size (90%) • Daily class schedule (69%) • Classroom facilities (68%) • Library resources/services (65%) • Admission/registration services (61%)	• Parking (59%) • Transportation (38%) • Food Services (31%) • Bookstore Services (17%) • Career counselling/employment (14%)
	Low	**Nice to have**	**Afford to Ignore**
		• Library resources/services (13%) • Artistic/cultural events (12%) • Places to study (11%) • Classroom facilities (11%) • Campus safety/security (9%)	• Food Services (6%) *No other categories greater than 5%.*

Some of the student comments made reference to dissatisfaction with food services (quality, selection and price) and with the bookstore (price). These comments collectively expressed a desire for a wider array of higher quality foods that cost less.

> *The cafeteria is overpriced and offers very little diversity for a STUDENT income. Parking is awful; every day parking lots were full up in every lot but the very bottom. My buildings are at the top of campus. Perhaps selling more parking passes than spots in the lot is not the best idea? Or expand the lot. I've seen some room (though I'll admit I have little zoning knowledge). But there's room to expand the top lot some. As far as activity costs I feel they are poorly spent; pancakes are not an effective use of my hard earned money. I had to take many courses in my program and so was subject to many activity fees.*

Chart 23: Top Strengths of VIU According to Nanaimo Forestry Students

Category	Strength
Class size	90%
Your daily class schedule	69%
Classroom facilities	68%
Library resources and services	65%
Admissions and registration services	61%
Availability of computer equipment and other…	60%
Usefulness of institutional website	57%
Places to study	55%
Financial aid services	55%
Public lectures, guest speakers and other…	53%
Campus safety and security	53%
Intramural sports and outdoor recreation activities	51%
Opportunities for socializing with other students	47%
Gymnasium/fitness facilities	47%
Bookstore services	45%
Opportunities for involvement in campus…	39%
Career counseling and help finding employment	36%
Food services	32%
Artistic, theatrical, musical or other cultural events	24%
Transportation	22%
Parking	8%

STUDENT ENGAGEMENT

The specific policy item reads:

> *Is the morale of students in the program/department good?*
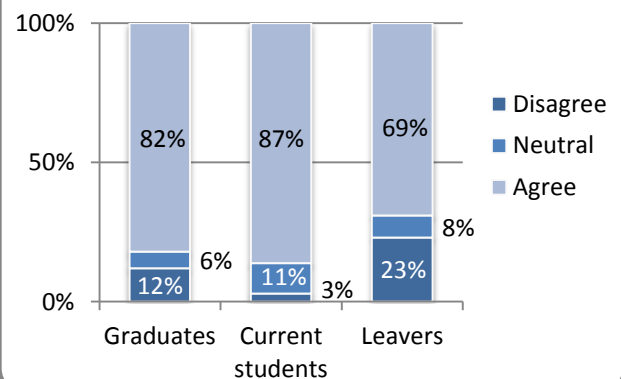
Program Engagement Measures

A majority percentage of students (82% of 84) agreed that "the morale of students in the program was generally good."[61] These results are somewhat skewed by graduation status, as shown in Chart 24.

Chart 24: Agreement: "Morale is Generally Good"

	Graduates	Current students	Leavers
Agree	82%	87%	69%
Neutral	6%	3%	8%
Disagree	12%	11%	23%

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61 [S48]

Overall morale within the class was good, however there were periods where the workload was overwhelming and there was little perceived flexibility from faculty. During these times I believe morale was in the basement and many students questioned why they took the program in the first place. More coordination among faculty and students is necessary to prevent these situations, in fact there were no formal opportunities for students and faculty to meet and address issues. Generally it was up to one or more vocal students to bring up any problems with individual professors.

Institutional Engagement Measures

For the purposes of this analysis, student morale was also measured by four secondary criteria in both the student and faculty surveys, namely the extent to which:

- Students are made to feel welcome.[62]
- There is respect for individual differences and diversity.[63]
- Students experienced a sense of community.[64]
- Athletic programs contribute to a sense of school spirit.[65]

Forestry students are quite positive about feeling welcomed at VIU, but are less so about the sense of community among students or the contribution athletic programs make to school spirit. The rating for athletic programs is consistent with the results from other program reviews.

Table 22: Learning Environment

Environmental Attribute	Students Agree	
Students are made to feel welcome.	86%	
There is respect for individual differences and diversity.	71%	
There is a sense of community among students.	61%	
Athletic programs contribute to a sense of school spirit.	44%	

FACULTY-STUDENT COMMUNICATION

The specific policy item reads:

Are faculty and department expectations clearly communicated to students and are there sufficient opportunities for students to communicate with faculty and raise issues?

This policy item contains three issues: clearly communicated expectations, opportunities for students to communicate with faculty, and opportunities to take part in departmental decision-making. The first issue is answered by a question asking students whether

Table 23: Forestry in Context: Approachableness of Faculty

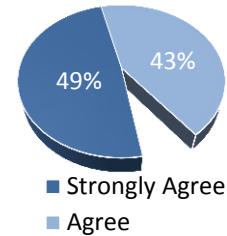| Question (agreement)	Forestry	Comparison Group		Forestry in Relation
The faculty are available, approachable and helpful outside of class time.	92%	Non-degree	84%	**+8**
		VIU	88%	**+4**

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[62] [S118]
[63] [S120]
[64] [S119]
[65] [S121]

"faculty clearly communicated their expectations for my performance to me"; a positive 79% of students agreed that faculty did.[66]

The second issue is explored by a question on the approachability of faculty outside of class; students were very positive on this measure (see Chart 23).[67] Table 23 shows that Forestry provides a somewhat higher calibre of faculty-student interaction as other non-degree programs and VIU in general. These results point to a strong culture of student guidance in the Forestry program, and in VIU programs overall.

Chart 25: Faculty are Available, Approachable and Helpful Outside of Class

■ Strongly Agree
■ Agree

Students were also asked whether opportunities existed for student involvement in departmental affairs, meaning formal or informal consultation of students in departmental matters.[68] Seventy percent agreed or strongly agreed that these opportunities existed. This percentage is higher than that found in other program reviews.

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[66] [S33]
[67] [S124]
[68] [S49]