

Economics Flexible Pre-Major Analysis Report

For the Economics Articulation Committee

March 2010

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Economics Flexible Pre-Major Report

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Section 1: Introduction

Summary:

This report is authored by a subcommittee of the BCCAT Economics Articulation Committee. The subcommittee consists of three committee members plus the committee chair and an external consultant.

The principle objective of this project is to determine the feasibility of an Economics FPM (flexible pre-major). The conclusion of the subcommittee is that the FPM process is worth pursuing.

Purpose of FPM:

The goals in creation of any FPM include:

1. Minimization of student course duplication and redundancy;
2. Ensurance of high standards agreeably defined and met;
3. Ensurance of institutional, faculty and program concerns being addressed.

In summary, the goal is minimization of source duplication and redundancy for students in a way that does not unduly increase costs for other participants in the system.

There are some costs involved in moving towards a universal FPM. Some institutions have specific courses that may be problematic for a FPM. Also, there are differences in the placement of courses and their prerequisites. If the committee decides to move towards an FPM, these differences will need discussion.

Outline of Report

This report follows the general headings as provided by BCCAT's list of deliverables for the FPM analysis project. In the Section 2, **Consultative Process**, we review the data and opinion gathering process that led to this report. Included is a brief discussion of the consultative process including committee formation and the questionnaires sent to institutions.

In Section 3, we discuss the **transfer patterns** within BC for the major. While this information is not well tracked¹, potential patterns are listed. A list of sending and receiving institutions is tabled. Also included in this section is a table identifying the type of major. In economics, the major is offered in Arts, Science, Business (Commerce) and as part of a joint major.

Section 4 uses revealed preference to indicate **differences in course objectives and learning outcomes**. The core of the data collection is in the required lower—level courses. Based on the BCCAT transfer guide, content of courses taught at the same level does not appear to be a significant issue². At heart of

¹ This was queried on the questionnaire. Most institutions stated they don't collect the data or it was too time consuming to obtain.

² This might be overstating a bit. An intermediate theory course taught with one math prerequisite is likely to be less rigorous than one taught with two math prerequisites – even where the same text is being used.

program differences is the sequencing of the courses -- the level at which courses are being taught. If the FPM is to be achieved, it is this difference that must be addressed.

Section 5 presents some **observations and resultant implications**. The observations are based on both data collected and some anecdotal comments. Lower levels differences between programs result primarily from a few specific courses and from the placement of the intermediate theory courses.

Section 6 presents several **alternative approaches** towards a potential FPM. It is also the concluding section.

The Appendices contain the questionnaires and summative responses in tabular form. The End Notes section follows the Appendices.

In the remainder of this introduction, we define some of our commonly used terms as they are used in this report.

Definitions:

1. **Associate Degree:** the Associate Degree is a 60 or more credit-hour program designed as a general knowledge/generally transferable program. Variations include KPU's Associate of Arts (Economics) degree.
2. **Intermediate:** Intermediate theory courses (Microeconomics and Macroeconomics). These are commonly taught in second or third year.
3. **Post-Principles:** Courses taught following the Principles courses at the first or second year.
4. **Principles:** The first theory courses. They are commonly taught as Microeconomics and Macroeconomics in year one.
5. **Receiving Institutions:** Institutions that provide an economics major and accept transfer credit into the major. (Note that this definition is major based rather than institution based.)
6. **Sending Institutions:** Institutions that don't have an economics major but do provide transferable courses for use in economics majors. (Note that this definition is major based rather than institution based.)

Acronyms

1. FPM: Flexible Pre-Major.

Institutions included or contributing:

1. Alexander (Alexander College);
2. BCIT (British Columbia Institute of Technology);
3. Camosun (Camosun College);
4. Capu (Capilano University);
5. CNC (College of North Caledonia);

6. Columbia (Columbia College);
7. Coquitlam (Coquitlam College);
8. Corpus Christi (Corpus Christi);
9. COTR (College of the Rockies);
10. Douglas (Douglas College);
11. FDU (Farleigh Dickenson University);
12. KPU (Kwantlen Polytechnic University);
13. Langara (Langara College);
14. NIC (North Island College);
15. NLC (Northern Lights College);
16. NWCC (North West Community College);
17. OCC (Okanagan Community College);
18. Quest (Quest University);
19. Selkirk (Selkirk Community College);
20. SFU (Simon Fraser University);
21. SSDC (Sprott-Shaw Degree College);
22. STMU (Saint Mary's University College);
23. TRU (Thompson Rivers University);
24. TWU (Trinity Western University);
25. UBC (University of British Columbia);
26. UBC-O (University of British Columbia – Okanagan);
27. UCW (University Canada West);
28. UFV (University of the Fraser Valley);
29. UNBC (University of Northern British Columbia);
30. UVIC (University of Victoria);
31. VCC (Vancouver Community College);
32. VIU (Vancouver Island University).

Section 2: Consultative process

This section briefly reviews the consultative process including meetings, significant correspondence and questionnaires. Each is listed with the purposes stated.

2008 April 28: The FPM analysis project for Economics was initially authorized by the Economics Articulation committee during the 2008 April 28 Economics Articulation meeting. The work proved excessive for a committee of one so, at the 2009 meetings, the chair requested the formation of a subcommittee. A motion to the same was proposed and carried.

2009 April 27: Three Economics Articulation Committee members (Yolina Denchev, Clifford Inimgba, and Suzanne VonderPorten) volunteered³. Dr. Bradley Krause of Bradley Krause and Associates was selected as external contractor for the project. The representatives of the senior universities Hugh Neary (UBC), Brian Krauth (SFU) and Linda Welling (UVIC) agreed to serve as resource persons. The Chair of the Economic Articulation Committee is an ex-officio member.

2009 August 26: The initial meeting of the subcommittee was August 26. Three members were present. The discussion centred on the types of information deemed essential, the types that were likely to be available and a wish list of information. A questionnaire was devised. The questionnaire was revised by Email correspondence, completed and Emailed to members on September 8 with a deadline of September 30. Some follow-up correspondence was done.

2009 November 2: A second meeting took place between the committee chair, Peter Wylie, and the external contractor on November 2. The questionnaire responses were discussed. It was concluded that any obstacles to a FPM do not appear to come from the admissions process. Rather, the obstacles seem to be in the total of the lower level requirements.

2009 December 18: As a follow up to the discussion of Questionnaire #1 responses, a second questionnaire was designed and distributed to the receiving institutions.

2009 December 28: A meeting between the external contractor and the subcommittee members took place in Coquitlam. The committee chair, Peter Wylie attended by conference call. A third questionnaire was devised. The purpose of this questionnaire was: 1. to determine the size of the various major programs and 2. To check for treatment of courses that are non standard in years taught.

Questionnaire #1

The first questionnaire was designed at the August meeting of the subcommittee. The questionnaire was edited during early September and Emailed to all committee members on September 18⁴.

The purposes of the first questionnaire were:

1. To gauge general interest in the project (gauged by response rates);
2. To assess transfer patterns (Section A, 9 through 13; Section B.9; Section C.2 through 12);
3. To determine the purposes of the degree (Section A.4);

³ In June, Suzanne VonderPorten was replaced by Heinz Nussbaum of KPU.

⁴ The questionnaire is reproduced in Appendix 1.A.

4. To gain some general information regarding the degree and programs (Section A. 5 though 8);
5. To determine any other issues that may affect a potential FPM (Section A.11 through 14; Section C. 4 through 14).

Responses to Questionnaire #1

The questionnaire response rates differ between the sending and receiving institutions – possibly due to differences in motivation on the FPM. At this writing, 19 of the 25 sending institutions polled had responded for a rate of 76%. The receiving institution response rate was *considerably lower at 43%*⁵.

Questionnaire #2

In December, Questionnaire #2 was designed and emailed to determine:

1. Both the purpose and extent of agreement of:
 - a. Course content;
 - b. Course placement by year;
2. The extent of control that departments have in determining course requirements.

Responses to Questionnaire #2

Six of seven institutions responded. The responses indicate areas of disagreement of some course placements. Differences in the treatment of the Intermediate Theory courses motivated follow—up Questionnaire #3.

Responses to Questionnaire #2 also indicate that areas of disagreement are within the control of the departments. This suggests that any changes to accommodate these areas need not involve the broader faculty or the university as a whole.

Questionnaire #3

The December meeting resulted in part in Questionnaire #3. This questionnaire was sent in January and attempted to determine:

1. The relative size of different Economic majors within each institution;
2. The treatment of transferred Intermediate theory courses.

Responses to Questionnaire #3

Six institutions responded to this questionnaire. For these respondents, the Arts major is the dominant major at 84% of the total. When honours are included, this figure rises to 87%.

The second part of the questionnaire – the treatment of the Intermediate Theory courses – indicates that only UBC refused any economics transfer credit for Intermediate Theory. SFU provides general credit but requires the Intermediate courses to be taken at SFU. Both UBC and SFU describe their Intermediate Courses as important in defining their degrees.

⁵ See Appendix 1.B for a table of responses.

Section 3: Current transfer patterns in Economics

An Economics Major is offered at seven BC institutions. The number of programs which include an Economics major is 21. Table 3.1 lists the institutions, degrees offered by each and the type of major. Each institution is listed and a web source of the requirements is given in the last column.

The types of majors are given as Major, Honours, Joint and Business (Commerce or BBA). The requirements for each can be sourced directly from each institution's web page. A summary of the requirements for each degree is provided in Appendix #4.

Table 3.1 shows the degree requirements as of three types – institutional, faculty and program. For example, each institution has requirements that govern all degrees; each faculty also has its own as does each program. The requirements are provided in Appendix 4 or can be accessed directly from the url in the last column.

Table 3.1⁶
Institutions offering Majors and Degrees Offered

Institution	Degree	Type	Summary Sources (URL's)
1.0 SFU			http://www.sfu.ca/arts/current/WQB.html
1.1 SFU	BA	Major	http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/MajorProgram.html
1.2 SFU	BA	Honours	http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/HonoursProgram.html
1.3 SFU	BA or BBA	Joint Major with Business	http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/JointMajorwithBusinessAdministration.html
2.0 TRU			http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm
2.1 TRU	BA	Major	http://www.tru.ca/business/economics/programs/bamajor.html
2.2 TRU	BA	Joint Major: Economics and Political Science	http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm
2.3 TRU	BBA	Major or Concentration	http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm
3.0 UBC			http://www.students.ubc.ca/calendar/index.cfm?tree=12,197,282,55
3.1 UBC	BA	Major	http://www.econ.ubc.ca/majors/prog.htm

⁶ The table is based on each institution's economics requirements as posted on their respective web pages.

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3.2 UBC	BA	Honours	http://www.econ.ubc.ca/majors/hon.htm
3.3 UBC	B.Comm	Major	http://www1.sauder.ubc.ca/Programs/Bachelor_of_Commerce/Program_Overview/Requirements/~media/Files/BCom/Worksheets/DECommerceEcon.ashx
3.3 UBC	BA	Joint with: Philosophy, Political Science Math Statistics	http://www.econ.ubc.ca/majors/cmphil.htm http://www.econ.ubc.ca/majors/cmpoli.htm http://www.econ.ubc.ca/majors/cmmath.htm http://www.econ.ubc.ca/majors/cmstat.htm
4.0 UBC-O			http://okanagan.students.ubc.ca/calendar/index.cfm?tre=18,282,857,1084#12398
4.1 UBC-O	BA	Major	http://okanagan.students.ubc.ca/calendar/index.cfm?tre=18,282,857,980
4.2 UBC-O	BA	Joint Major (Philosophy, Political Science and Economics)	http://okanagan.students.ubc.ca/calendar/index.cfm?tre=18,282,857,1255#14638
4.3 UBC-O	BSc	Major	http://okanagan.students.ubc.ca/calendar/index.cfm?tre=18,282,858,1224#14678
5.0 UNBC			http://www.unbc.ca/calendar/undergraduate/programs/university_learning_outcomes.html
5.1 UNBC	BA	Major	http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html
5.2 UNBC	BA	Joint Major with Political Science	http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html
5.3 UNBC	BSc	Joint Major with Mathematics	http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html
6.0 UVIC			
6.1 UVIC	BA	Major	http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html
6.2 UVIC	BA	Honours	http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html
6.3 UVIC	BSc	Major	http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html
6.3 UVIC	BSc	Honours	http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html

7.0 VIU			http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/index.asp#degreerequirements
7.2 VIU	BA	Major	http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/economics.asp

Types of Majors:

The types of majors are four – Arts, Science, joint and honours. Shown in Table 3.2, all institutions with a major have the Arts major. In addition, the three senior universities have honours, which for each is an extension of the major with additional course requirements. The honours decision is made after lower levels are complete and acceptance is primarily a function of grades earned to that point in the program.

UBC-O, UNBC and UVIC have a Science major. TRU, UBC, UBC-O and UNBC also have Joint majors. TRU and UBC have economics majors in their institution's business program.

It should be noted that the senior universities, SFU, UBC and UVIC have the bulk (89%) of the province's Economics majors.

Table 3.2
Majors and Enrolment by Institution

Institutions	SFU	TRU	UBC	UBC-O	UNBC	UVIC	VIU	Totals
Major (Arts)	850	20 – 24	482	60	30	206	•	1650
Major (Science)				15	4	83		102
Honours	30		28			8		66
Joint Majors		16	64	18	30			128
Joint Major with Business		20 – 24						22
Totals	880	60	574	93	64	297		1968
% in Arts Major	96.6%	36.7%	84%	64.5%	46.9%	69.4%		83.8%
% in Major + Honours	100%	36.7%	88.9%	64.5%	46.9%	72.1%		87.2%
Institution as % of total	44.7%	3%	29.2%	4.7%	3.25%	15.1%	•	
<p>• VIU did not respond. Of those that responded, the Arts Major included 83.8% of the Economics Majors. If the honours are included as part of the major, the number rises to 87.2%.</p>								

Section 4: Differences in Course Objectives and Learning Outcomes (by Revealed Preference)

Lower level requirements

It is not the intent of this section to identify all course objectives and desired learning outcomes. Rather, it is by identifying some of the differences and determining their importance that might indicate where changes are required to facilitate a common flexible pre-major. It is also in the assessment of those differences that might indicate whether a flexible pre-major is possible.⁷

Table 4.1 displays the lower—level Arts Major requirements in number of credit hours, credits or units.

Table 4.1
Lower Level Requirements⁸

Institutions	SFU	TRU	UBC	UBC-O	UNBC	UVIC ¹	VIU
Major (Arts)							
1. Economic -- Principles	8	6	6	6	6	3	6
2. Economics – Post Principles	6		6		6 ²		
3. Economics -- Intermediate		6		6		3	
4. Mathematics	3	6	6	6	6	1.5	3
5. Statistics	4	3			3	3	3
6. English (Literature)	6	6	6	6		1.5	6
7. Writing Intensive		6	3			1.5 ³	
8. Humanities (B- Hum at SFU,	6						
9. Sciences (B-Sci at SFU,	6	3	6	6			
10. Social Sciences (other than Economics)						1.5	
11. Breadth courses	12	12					
12. Distribution requirements		6			6		
13. Language other than English		6	3	3			
¹ UVIC's unit system uses numbers equal to half that of the other institutions. For example, 3 UVIC units equal 6 VIU credits.							
² UNBC requires <i>History of Economic Thought and Canadian Economic History</i> as the Post Principles.							
³ Based on the transfer guide, UVIC requires <i>Econ 225</i> to be taken at UVIC.							

By rows:

1. The BCCAT transfer guide indicates that the Principles courses are standard across all institutions.⁹

⁷ In the discipline of Economics, this is known as Marginal Analysis.

⁸ The table is based on each institution's economics requirements as posted on their respective web pages.

2. The Post—Principles requirements show a difference between institutions.
 - a. SFU and UBC require six hours of second or third year Economics courses;
 - b. UNBC requires two specific courses (History of Thought and Canadian Economic History.)
3. Differences exist in the location of the Intermediate Theory courses.
 - a. TRU, UBC-O and UVIC require Intermediate Theory in the lower levels.
 - b. Elsewhere, they are upper level courses.
4. SFU, UVIC and VIU mathematics requirements are half that of the others.
5. Statistics requirements vary from none to 4 hours.
6. All programs require Literature and Writing intensive courses.
 - a. UVIC is the only institution to specify a particular course, ECON 225. ECON 225 does not articulate within the transfer system.
7. through 12. indicate overlapping and similar requirements.
Row 13 shows that language requirements exist only for TRU, UBC and UBC-O.

It appears that the lower level requirements are overall similar. Differences lie in only three general areas:

1. The location of the Intermediate theory courses;
2. The requirement for two specific post-principles courses by UNBC;
3. The requirement for a non-articulated course, ECON 225, at UVIC.

Agreement and Disagreement on Courses

The first part of Questionnaire #2 was designed to determine the extent of agreement or disagreement regarding courses by content and placement. A set of statements was provided and respondents were asked to indicate agreement or disagreement and comment as necessary. Responses by institution are shown in Table 4.2.

By question:

1. *The purpose of the Economic Principles courses is to ensure a common basis of understanding of economic theory.*
All respondents agreed.
2. *The Economic Principles courses taught by members of the BC transfer system are essentially the same.*
All respondents agreed. Further, all institutions including non-responders provide full transfer credit for principles courses.
3. *The purpose of the post-principles field courses is to provide principles theory application experience thus to deepen the understanding of the principles.*

⁹ <http://bctransferguide.ca>.

All respondents agreed.

4. *The purpose of the Intermediate theory courses is to increase competency in understanding and application of economic theory.*

This item is a point of disagreement. SFU describes its Intermediate courses as the “defining core of the program.”

5. *The Intermediate theory courses taught by members of the BC transfer system are essentially the same.*

Four of the five respondents disagreed.

6. *Calculus is essential to understanding Intermediate theory.*

There is disagreement on this item. The disagreement corresponds to the location of the Intermediate Theory courses. Respondents from institutions where Intermediate is taught in lower levels, deem calculus as not essential.

7. *Statistics is essential prior to attempting upper level Economics courses.*

Only one respondent disagreed but all agreed with the usefulness of statistics training.

Table 4.2
Responses to Questionnaire #2

	SFU	TRU	UBC	UBC-O	UNBC	UVIC	VIU
Purpose and Agreement on Courses							
1: Principles	Agree	Agree	Agree	Agree	Agree	•	Agree
2: Principles (sameness)	Agree	Agree	Agree	Agree	Agree	•	Agree
3: Post Principles	Agree	Agree	Agree	Agree	Agree	•	Agree
4: Intermediate	Disagree	Agree	Disagree	Agree	Agree	•	Agree
5: Intermediate (sameness)	Disagree	Disagree	Disagree	Agree	Disagree	•	Disagree
6: Calculus	Agree	Agree (Micro) Disagree (Macro)	Agree	Disagree	Agree	•	Disagree
7: Statistics	Agree	Agree	Agree	Disagree	Agree	•	Agree

Differences in requirements and philosophy towards math/stat requirements seem determined by the location of the Intermediate Theory courses. This suggests that if the Intermediate Theory courses are not part of a FPM, then additional math and stats courses must be included.

Section 5: Observations and Issues

This section itemizes some of the issues brought to the subcommittee's attention. The issues are categorized with resulting FPM implications.

1. **Scope:**

The Arts Economic Major, including the honours program, includes approximately 87% of the students in Economics Majors.

Implication: It is probably advisable to limit the FPM discussion to the Arts Major. (Table 3.2)

2. **Current Enrolments:**

The SFU, UBC and UVIC major programs have the majority of economics major and honour students. UBC has a competitive entry system. (Table 3.2)

Implications:

- a. If we consider SFU and UBC to be the targets of most transfer students, then a FPM must ensure minimum credit loss for those who fail to be accommodated by UBC and SFU.
- b. Leaning too much on the UBC and SFU models might inhibit the product differentiation needed by smaller programs to find a sustainable market niche.

3. **Standards of BC Universities:**

Ratings agencies consistently place UBC, SFU and UVIC in the top tiers of international universities.¹⁰ Further, the Academic Ranking of World Universities ranking of Social Sciences has both UBC and SFU's the top 100.

The methodologies vary but the presence of the universities on these lists indicates that the three universities have high-quality programs which are attractive internationally.

Implication: It may be prudent for any pre-major program to emulate our local world leaders.

4. **Transfer Patterns:**

Anecdotal information suggests that there are two types of transfer movement within Economics – a provincial one with UBC and SFU being the primary magnets and regional transfers within each of the Okanagan (TRU and UBC-O), Northern BC (UNBC) and Vancouver Island (UVIC and VIU).

Implication: In the event that unanimous agreement is not possible, a useful FPM might still be possible for the majority of students. If so, then there might not be a problem for those that are targeting their local institution.

¹⁰ See: [4International](#), [Academic Review of World Universities](#), [CSIS](#) and [QS](#) for examples of current rankings and methodologies. SFU's rank ranges from 57 to (201-302); UBC from 36 to 74; UVIC from 176 to 241.

5. **Distinctiveness of Courses:**

Distinctive courses are required by both UVIC and UNBC.

UVIC's writing course is not articulated elsewhere;

UNBC has specific courses required for its post-principles courses.

Implication: Entrenched positions here might make a province-wide 60 credit hour FPM difficult.

6. **Writing requirements:** There are some differences between English requirements of literature and writing.

Implication: The writing and literature components may need specification.

7. **Intermediate Theory:**

Intermediate Theory courses are taught in second year by some institutions and in third year by others. Differences in prerequisites and location by level indicate nontrivial differences in content.

Implication:

- a. One issue here is whether delaying the Intermediate courses at institutions where intermediate is taught in lower levels will handicap transfer students.
- b. Prerequisites for Intermediate differ depending on level.

8. **General Notes:**

- a. It may be that a useful FPM can only be devised without including all institutions.
- b. SFU has a SFU-GPA requirement. Students applying for the major need to obtain a GPA at SFU. This requires at least one term at SFU.

Section 6: An assessment of issues and some alternatives

The differences between programs are in some unique course requirements and in the location of some courses. To review:

1. Location of Intermediate Theory courses together with implications regarding prerequisites must be resolved;
2. The non articulation of ECON 225 at UVIC might be a problem;
3. The specification of two specific post-principles at UNBC might be a problem.

Section 6 presents four alternatives. The alternatives are approaches, not solutions. The alternatives flow from the preceding sections. The alternatives are exhaustive in the sense that alternative four is “other alternatives” and five is “do nothing at this time.”

Alternative 1: an Associate Degree:

The Associate of Arts is defined as requiring:¹¹

1. Total credits: 60 credits;
2. Minimum from Arts at second year: 18 credits;
and
3. English: 6 credits;
4. Science: 9 credits which may include Mathematics, Computing Science or Statistics but must include 3 hours of a lab science;
5. Social Sciences: 6 credits;
6. Humanities: 6 credits;
7. Other Arts: 24 credits and
8. Other: 9 credits.

Table 6.1 illustrates the Associate Degree alternative by comparing to the minimum standard taken from each institution for its lower-level requirements (Minimum Standard column). As shown, meeting each institution’s minimum credit requirements would entail at least 71 credits. The last column, Differences to address, simply shows the difference between the Minimum Standard column and the Associate of Arts.

Accommodating some of those differences is straight forward and has been accomplished elsewhere. Following KPU’s approach, the Principles courses can be taken from the Social Science requirements, the Post Principles from the Other Arts.¹² Other accommodations can be made such as an additional math and stat from the Other category but the result is a program requiring more than the 60 credit hours total that defines the degree.

¹¹ Associate degree requirements can be found at: <http://bctransferguide.ca/associate/requirements.cfm>.

¹² See < <http://www.kwantlen.ca/calendar/programs/aad-econ.html>>.

Additional notes:

1. SFU's Principles courses total eight credit hours. However, transferred principles at 3 hours each do satisfy the SFU requirements for principles.
2. Remaining differences include:
 - a. Intermediate courses;
 - b. Math requirements;
 - c. Stat requirements (UVIC);
 - d. English/Writing
 - e. Lab requirements (SFU).

**Table 6.1
 Lower Level Requirements**

Institutions	Minimum Standard	Associate of Arts	Differences to address
Major (Arts)			
1. Economic Principles	6		6
2. Economics Post Principles	6		6
3. Economics Intermediate Theory	6		6
4. Mathematics	6	3	3
5. Statistics	6	3	3
6. English Literature	6	6	6
7. Writing Intensive	6		
8. Humanities other than English	6	6	
9. Lab Sciences	6	3	3
10. Other Arts	3	12	?
11. Other	12	9	3
Total Credits:	71		

Alternative 2: Multi-flexibility

While an FPM is designed to assist students in taking a particular defined set of lower-level courses and obtain entry into any institution's major program, it may be that a single FPM will not work for Economics. There are clear lower-level distinctions between some of the programs.

Table 6.2 illustrates a simplified approach to one of the distinctions -- the placement of Intermediate Theory and necessary prerequisites. All programs agree on two each of Principles and Post-Principles courses. Where the Intermediate courses are required, the math requirements are higher.

Referring to the alternatives (columns) as High and Low Quant(itative), moves the Math/Stat requirements counter to the Intermediate Theory placement. Students wanting to avoid a quant-intense degree and retain an option for either a business studies or joint degree would take the Low Quant program. Students determined to do a quant-intense degree could do so without penalty.

Table 6.2
High and Low Quantitative FPM

Institutions	Minimum Standards	High Quant	Low Quant
Major (Arts)			
1. Economic Principles	6	6	6
2. Economics Post Principles	6	6	6
3. Economics Intermediate Theory	6	0	6
4. Mathematics	6	6	3
5. Statistics	6	6	3

Alternative 3: Start from the beginning.

One alternative that must be addressed is that of beginning from a blank slate and design the lower-levels without regard to existing programs. The consequence is that the upper-levels would be later designed.

It is likely that the effort and commitment required for a complete redesign is one better left to the new and adventurous that might be suppliers of economics degrees in the future.

Further, given the existence of competitive admissions in Economics, it is easy to conclude that the current system does not need an overhaul.

Alternative 4: Other alternatives.

This report will be distributed to all members of the economic articulation committee. It is expected to be further distributed to all economics faculty members. From such an august group, more than one additional alternative is likely to be forthcoming.

Alternative 5: Do nothing at this time.

As always, there is the option of doing nothing. The current system does seem to be working reasonably well. The “penalty” to students of targeting one institution or program and not being accepted seems to be in the area of three courses. This is approximately a one term penalty. Whether this is too much or whether it occurs too often are assessments that will be made in the annual articulation meetings in May.

Section 7: Appendices

1. Appendix 1: Questionnaire #1
2. Appendix 2: Questionnaire #2
3. Appendix 3: Questionnaire #3
4. Appendix 4: List of Economics Major Admission requirements by Institution.

Appendix 1: FPM Questionnaire #1

The questionnaire is in three sections. Section A is for receiving institutions. B is for those that are actively contemplating an economics major and C is for sending institutions. In this appendix, the questions are listed. In the original questionnaire, fields were used to contain the responses.

Flexible Pre-Major Analysis Project – Questionnaire

To facilitate the collection of data, we have divided this questionnaire into three parts:

Part A – Institutions currently offering an Economics Major (“receiving institutions”)

Part B – Institutions actively contemplating offering an Economics Major (future “receiving institutions”)

Part C – “Sending institutions”

Note: Depending on your offerings/planned offerings, more than one section may be applicable to your institution. Please fill out all sections that apply.

E-mail your answers to Brad Krause bjkrauseca@yahoo.ca by **September 30, 2009**. Thank you for your cooperation.

Part A

Institutions currently offering an Economics Major

1. Name of institution
2. Name of Department offering the degree
3. Name of degree (e.g. BA, BSc, BBA in Economics etc.)
4. What is the objective of the degree?
5. What are the Lower Level (Year 1 and 2) requirements for entry into the Economics Major programme? Please provide information on course requirements, GPA and any other entry requirements.
6. Is there an Honours option? If yes, what are the Lower Level (Year 1 and 2) requirements for entry into the Honours programme? Please provide information on course requirements, GPA and any other entry requirements.
7. **For each of the required courses you listed in (5) and (6) above, please attach an official course outline.**
8. Has your institution made substantial changes to the Economics Major programme during the past three or four years? If yes, please describe the changes.

Transfer Students

9. Using the latest available data, how many transfer students apply directly from other institutions to your Economics Major programme, including Honours if applicable, per year? Which are your major sending institutions?
10. What percentage of applicants is accepted into the programme?
11. If not all students are accepted, what are the main reasons?

12. What suggestions do you have that would make it easier for students from “sending institutions” to transfer into your Economics Major programme?
13. Past experience indicates that applicants who are denied entry into Commerce or Business Administration Major Programmes often choose the Economics Major programme as a second-best option. Is this occurring at your institution? If yes, do these students face specific problems meeting the Economics Major entry requirements? If yes, please describe the main problems.

Additional Information

14. Please describe any other information/issues you think are relevant to the Flexible Pre-Major Analysis Project.
-

Part B

Institutions actively contemplating offering an Economics Major by the fall semester of 2011 or earlier

1. Name of institution
2. Name of Department offering the degree
3. Name of degree (e.g. BA, BSc, BBA in Economics etc.)
4. When do you expect the new degree programme to be implemented (i.e. start accepting students into the programme)?
5. What is the objective(s) of the degree?
6. What will be the Lower Level (Year 1 and 2) requirements for entry into the Economics Major programme? Please provide information on course requirements, GPA and any other entry requirements.
7. Will there be an Honours option? If yes, what will be the Lower Level (Year 1 and 2) requirements for entry into the Honours programme? Please provide information on course requirements, GPA and any other entry requirements.
8. **For each of the required courses you listed in (6) and (7) above, please attach an official course outline.**

Transfer Students

9. Do you expect students from other institutions (“sending institutions”) to enter your new Economics Major programme? If yes, how many students do you expect will apply per year?

Additional Information

10. Please describe any other information/issues you think are relevant to the Flexible Pre-Major Analysis Project.
-

Part C

“Sending institutions”

1. Name of institution

2. How many students from your institution apply to transfer into the Economics Major programme of a University in B.C. per year? (Your registrar may have this information.)
3. What percentage of your students gets accepted?
4. What issues arise if students don't get accepted?
5. Which are the most popular transfer destinations of students seeking transfer into an Economics Major programme?
6. Does your institution have courses targeted to only one or two of the "receiving institutions" (i.e. aimed at meeting the lower-level requirements of just one or two institutions' Economics Major programmes)? If yes, please list.
7. If yes, which institutions?
8. Why those institutions?
9. Which courses?
10. Does your institution offer enough economics courses to meet the lower-level requirements of at least one "receiving" institution?
11. If yes, which institution?
12. What suggestions do you have that would make it easier for students from your institution to transfer into a "receiving institution's" Economics Major programme?
13. Please describe any other information/issues you think are relevant to the Flexible Pre-Major Analysis Project.

Responses to Questionnaire #1

Table A2.1 documents the response rates to Questionnaire #1. 76% of sending institutions responded. 43% of receiving institutions responded.

Appendix Table 1.1
Sending¹ Institutions Responses to Questionnaire #1

Sending Institutions	Responded	Did not Respond
Alexander	•	
BCIT		•
Camosun	•	
Capilano	•	
CNC		•
Columbia	•	
Coquitlam	•	
Corpus	•	
COTR	•	
Douglas	•	
FDU	•	
KPU	•	
Langara	•	
NIC	•	

NLC		•
NWCC		•
OCC		•
Quest	•	
Selkirk	•	
SSDC	•	
STMU	•	
TWU	•	
UCW	•	
UFV	•	
VCC		•
Totals Sending	19	6
Response Rate	76%	

Appendix Table 1.2
Receiving¹ Institutions Responses to Questionnaire #1

Receiving Institutions	Responded	Did not Respond
SFU	•	
TRU		•
UBC	•	
UBC-O	•	
UNBC		•
UVIC		•
VIU		•
Total Receiving	3	4
Response Rate	43%	

Appendix 2: Questionnaire #2

This questionnaire is part of the information gathering being done for the Economics Flexible Pre Major (FPM) analysis project.

This questionnaire is to determine the extent of agreement regarding courses and prerequisites.

In an effort to save participants' time, please read each of the following statements and state "agree or disagree" (Simply erasing one of the two words is probably easiest and least confusing). Comment space is available – any comments are appreciated. When reading and responding to these statements, please remember that **the context is the transfer system**.

1. The purpose of the Economic Principles courses is to ensure a common basis of understanding of economic theory. (agree / disagree)
2. The Economic Principles courses taught by members of the BC transfer system are essentially the same. (agree / disagree).
3. The purpose of the post-principles field courses is to provide principles theory application experience thus to deepen the understanding of the principles. (agree / disagree)
4. The purpose of the Intermediate theory courses is to increase competency in understanding and application of economic theory. (agree / disagree)
5. The Intermediate theory courses taught by members of the BC transfer system are essentially the same. (agree / disagree)
6. Calculus is essential to understanding Intermediate theory. (agree / disagree)
7. Statistics is essential prior to attempting upper level Economics courses. (agree / disagree)
8. The requirements that are determined within the Economics Department are:
 - a. Economic Principles (agree / disagree)
 - b. Post Principles (non theory) (agree / disagree)
 - c. Intermediate Theory (agree / disagree)
 - d. Mathematics (agree / disagree)
 - e. Statistics (agree / disagree)
 - f. English Literature (agree / disagree)
 - g. English Writing (agree / disagree)
 - h. Social Science requirements (agree / disagree)
 - i. Science Requirements (agree / disagree)
 - j. Other:

Table of Responses to Questionnaire #2

Appendix Table 2.1

Receiving¹ Institutions Responses to Questionnaire

Receiving Institutions	Responded
SFU	Yes
TRU	Yes
UBC	Yes
UBC-O	Yes
UNBC	Yes
UVIC	
VIU	Yes
Total Receiving	6
Response Rate	85.7%

Appendix Table 2B.2

Responses to Questions

	SFU	TRU	UBC	UBC-O	UNBC	UVIC	VIU
Purpose and Agreement on Courses							
1: Principles	Agree	Agree	Agree	Agree	Agree		Agree
2: Principles (sameness)	Agree	Agree	Agree	Agree	Agree		Agree
3: Post Principles	Agree	Agree	Agree	Agree	Agree		Agree
4: Intermediate	Disagree	Agree	Disagree	Agree	Agree		Agree
5: Intermediate (sameness)	Disagree	Disagree	Disagree	Agree	Disagree		Disagree
6: Calculus	Agree	Agree (Micro) Disagree (Macro)	Agree	Disagree	Agree		Disagree
7: Statistics	Agree	Agree	Agree	Disagree	Agree		Agree
Control of Requirements							
8.a: Principles	Agree	Agree	Agree	Agree	Agree		Agree
8.b: Post Principles	Agree	Disagree	Agree	Agree	Agree		Agree
8.c: Intermediate	Agree	Agree	Agree	Agree	Agree		Agree
8.d: Mathematics	Agree	Agree	Agree	Agree	Agree		Agree
8.e: Statistics	Agree	Agree	Agree	Agree	Agree		Agree
8.f: English Lit	Disagree	Agree	Agree	Disagree	Agree		Agree?

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8.g: English Writing	Disagree	Agree	Agree	Disagree	Agree		Agree?
8.h: Social Science	Disagree	Agree	Disagree	Disagree	Agree		Agree?
8.i: Science	Disagree	None?	Disagree	Disagree	NA		Disagree

Appendix #3: Questionnaire #3

As of January 1, how many students are in each program (majors only):

	1 st year	2 nd year	3 rd year	4 th year	Totals
BA					
SFU	50	100	350	350	850
TRU			10 – 12	10 – 12	20 – 24
UBC			242	240	482
UBC-O		5	33	22	60
UNBC			15	15	30
UVIC					206
VIU					
Total BA					1650
BA Honours					
SFU			15	15	30
UBC			12	16	28
UVIC					3
Total BA Honours					61
BSc					
UBC-O		10	4	1	15
UNBC			2	2	4
UVIC					83
Total BSc					102
BSc Honours					
UBC-O					
UVIC					5
VIU					
Total BSc Honours					5
BBA or Commerce					
SFU					
TRU			10 – 12	10 – 12	20 – 24
UBC					
Total BBA or Commerce					
Joint Majors (other than business or commerce)					
TRU			8	8	16
UBC			31	33	64
UBC-O (PPE)			8	10	18
UNBC			15	15	30
Total Joint Majors					
Totals:					

1. For institutions where intermediate is a third year subject, how are 2nd year transfers of intermediate handled?

- a. Credit given at 3rd year?
- b. Credit given for 2nd year elective (UBC-O,)
 or general credit and
 - i. Intermediate at 3rd year must be taken? (SFU,
 - ii. Intermediate at 3rd year may not be taken?
- c. No credit given?
- d. Other _____

Appendix Table 3.1
Receiving¹ Institutions Responses to Questionnaire #3

Receiving Institutions	Responded	Credit for Intermediate
SFU	Yes	2 nd year elective+ must take Intermediate at third year
TRU	Yes	Is a lower level course
UBC	Yes	No credit given
UBC-O	Yes	Is a lower level course
UNBC	Yes	Depends on information provided
UVIC		Is a lower level course
VIU		
Total Receiving	5	
Response Rate	71%	

Appendix #4: List of Economics Major Admission requirements by Institution

The admission requirements are selective statements taken from each institution's web page and are *provided in italics*. Additional commentary is provided in standard font. Formatting is the author's and is for the purpose of readability only.

SFU:

BA Lower Level requirements:

Source: <http://www.sfu.ca/arts/current/WQB.html>

WRITING, QUANTITATIVE AND BREADTH REQUIREMENTS

1. *Two Writing courses (6 W units), including one upper division writing course at SFU*
2. *Two Quantitative courses (6 Q units)*
3. *Two Social Science Breadth courses (6 B-Soc units)*
4. *Two Humanities Breadth courses (6 B-Hum units)*
5. *Two Science Breadth courses (6 B-Sci units)*
6. *Four additional Breadth courses (12 units, undesignated) –may or may not be B-designated courses.*

* *All Breadth courses (designated and additional) must be **outside the student's major***

** *Students choosing to complete the Bachelor of Arts degree with a joint major, joint honours, double major, or two extended minors may satisfy the Breadth requirements (designated or not designated) with courses taken in either one or both disciplines.*

SFU: Major Lower Level requirements

Source: <http://www.econ.sfu.ca/Undergraduate Program/DegreesandPrograms/MajorProgram.html>

1. Economics:
 - a) Economic Principles (8 units)
 - b) **Math (3 units)**
 - c) Stats (4 units)
 - d) 200 level ECON or BUEC courses (two courses -- in addition to BUEC 232(Stats))
- WQB REQUIREMENTS

SFU: Honours Lower Level requirements

Source: <http://www.econ.sfu.ca/Undergraduate Program/DegreesandPrograms/HonoursProgram.html>

*Lower division requirements are the same as for the [major program](#) except that at least **one** course from the group requirement list must be included in lower levels.*

SFU Joint Major with Business

Source:

<http://www.econ.sfu.ca/Undergraduate Program/DegreesandPrograms/JointMajorwithBusinessAdministration.html>

These are the same as those for the [economics major](#) and the business administration major

TRU

BA Lower Level requirements:

Source: <http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm>

1. **First-Year English Requirement.** A minimum of six first-year English credits.
2. **Scientific and Formal Reasoning Requirement.** A minimum of nine academic course credits in any combination of courses in: Science, Anthropology, Physical Geography, Mathematics, Computing Sciences, Statistics, Formal logic, Understanding Scientific Reasoning.
3. **Breadth Requirement.** A minimum of one 100-200 level course in at least four separate Arts disciplines. Arts disciplines include: Anthropology, Canadian Studies, Chinese, Economics, English, Film, French, Geography, German, History, Japanese, Philosophy, Political Studies, Psychology, Sociology, Spanish, Speech, Theatre, and Visual Arts.
Courses used for the purposes of fulfilling this requirement may also be used to fulfill the Distribution Requirement, Second Language Requirement, or 100-200 Level Writing Intensive Requirement. However, courses used to fulfill this requirement must be exclusive of any course used to fulfill the First-Year English Requirements and the Scientific and Formal Reasoning Requirement.
4. **Distribution Requirement.** A minimum of one 100-200 level course in at least two of the following categories: Humanities, Social Sciences, Creative and Performing Arts. (**Areas are provided on the web page**)
5. **Second Language Requirement.** A second language to grade 12 or six credits in a post-secondary second language courses.
Courses used to fulfill this requirement may also be used to fulfill the Breadth Requirement or Distribution Requirement.
6. **100-200 Level Writing Intensive Requirement.** A minimum of six credits in 100-200 level courses selected from a list of designated courses that are writing intensive.

TRU Major's Lower level requirements:

Source: <http://www.tru.ca/business/economics/programs/bamajor.html>

1. **Required Economic courses**
 - a. ECON 190: Introduction to Microeconomics
 - b. ECON 195: Introduction to Macroeconomics
 - c. ECON 290: Intermediate Microeconomic I
 - d. ECON 295: Intermediate Macroeconomics I
 - e. BUEC 232: Statistics for Business and Economics I
2. **Required Mathematics courses**
 - a. One of the following sequences: MATH 140 and 141; or MATH 117 and 124; or equivalent

TRU Joint Major Lower Level requirements (Economics and Political Science)

Source: <http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm>

1. MATH 117 or MATH 114
2. BUEC 232 Economic and Business Statistics 1
3. ECON 190 Principles of Microeconomics

4. *ECON 195 Principles of Macroeconomics*
 5. *ECON 290 Intermediate Microeconomics 1*
 6. *ECON 295 Intermediate Macroeconomics 1*
 7. *POLI 111 The Government and Politics in Canada*
 8. *POLI 121 Contemporary Ideologies*
-

TRU BBA Lower Level requirements

Source: <http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm>

Students must have completed the following Lower Division Requirements, or their approved equivalents, with at least a C- grade in each course.

1. *General Education:*
 - a. *Humanities Requirements* (12 credits which includes English (3) and Philosophy and English (3));
 - b. *Social Sciences* (12 credits which includes Principles of Economics (6));
 - c. *Science and Math* (6 credits);
 2. *Business* (24 credits which includes Statistics (6) and Managerial Economics (3));
 3. *Non-Business Electives* (6 credits).
-

UBC

Faculty of Arts requirements:

Source: <http://www.students.ubc.ca/calendar/index.cfm?tree=12,197,282,55>

All students in the B.A. and B.F.A. programs must complete the following Faculty of Arts requirements:

1. *Writing and Research Requirement, (6 credits)*
2. *Language Requirement, (3 credits)*
3. *Science Requirement, (6 credits)*
4. *Literature Requirement, and (6 credits)*

Students are encouraged to complete requirements 2, 3, and 4 - and must complete the Writing component of requirement 1 - in their first 60 credits.

UBC Major Lower Level requirements

Source: <http://www.econ.ubc.ca/majors/prog.htm>

Majors Program Admission Prerequisites:

Third year standing with 54 credits including:

1. *6 credits of Principles of Economics*
2. *6 credits of 1st year English*
3. *6 credits of 1st year Calculus**

4. 6 credits of 2nd or 3rd year level courses in Economics

**Note: Math 104 and Math 105, or equivalent.*

Selection for admission is based on the average mark in all credits of post secondary coursework attempted. However the 12 lowest credits may be dropped from this calculation providing they are for courses other than the program requirements listed above, and provided that the student is evaluated on a minimum of 48 credits.

Acceptance into the program is based on the number of seats available and not on a GPA cutoff. Students are ranked in order of their average mark and the top 220 or so are then accepted.

UBC Honours Lower Level requirements are the same as for the major plus application.

Source: <http://www.econ.ubc.ca/majors/hon.htm>

UBC B.Comm Lower Level requirements

Source:

http://www1.sauder.ubc.ca/Programs/Bachelor_of_Commerce/Program_Overview/Requirements/~media/Files/BCom/Worksheets/DECommerceEcon.ashx.

Regular Intake/Transfer

Year One

1. Engl 112;
2. Econ 101 and 102;
3. Math 104;
4. Comm 292 and 293;
5. Non Commerce Electives 12 credits.

Year Two:

1. Comm 290, 291, 294, 296, 298, 391, 392
2. Econ 301;
3. Non-Commerce: 6 credits.

From Pre Commerce program:

Year One:

1. Engl 112;
2. Econ 101 and 102;
3. Math 104;
4. Non Commerce Electives: 18 credits.

Year Two:

1. Comm 290, 291, 292, 293, 294, 296, 298, 299, 391, 392;
 2. Econ 301;
-

UBC Joint Majors Lower Level requirements

Sources:

<http://www.econ.ubc.ca/majors/cmphil.htm>

<http://www.econ.ubc.ca/majors/cmpoli.htm>

<http://www.econ.ubc.ca/majors/cmmath.htm>

<http://www.econ.ubc.ca/majors/cmstat.htm>

These joint degrees have the same requirements as the major.

UBC-O

BA Lower Level Requirements

Source: <http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,1084#12398>

1. English: six credits from 100 level courses.
2. Science: six credits from 100 level courses
3. Language: one other than English Requirement
4. Distribution Requirements: 18 credits from two disciplines within the Social Sciences and 18 credits from two disciplines within the humanities.

UBC-O Major Lower Level requirements

Source: <http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,980>

1. *ECON 101, 102; with a minimum combined average of 65%;*
2. *ECON 204, 205;*
3. *One of MATH 100, 116; and one of MATH 101, 142;*

UBC-O PPE Lower Level Requirements

Source: <http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,1255#14638>

1. *ECON 101, 102;*
2. *One of ECON 204, 205;*
3. *One of PHIL 111, 121;*
4. *One of PHIL 120, 220;*
5. *PHIL 230;*
6. *POLI 101, 220, 240;*
7. *STAT 121.*

UBC-O Science Major Lower Level requirements

Source: <http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,858,1224#14678>

1. *ECON Principles (6 credits)*
2. *MATH 100, 101 (6 credits)*
3. *CHEM 121, 123; or CHEM 111, 113 (6 credits)*
4. *PHYS 112, 122; or PHYS 102, 111 (6 credits)*
5. *Two of ENGL 112, 113, 114, 150, 151, 153 (6 credits)*

6. Two of ASTR 110, 120, 111, 121; BIOL 116, 125; COSC 111, 121, 122; EESC 111, 121; GEOG 108, 109 (6 credits)
7. ECON 204, 205 (6 credits)
8. MATH 200, 221 (6 credits)
9. STAT 230, 240 (6 credits)
10. Electives (6 credits)
11. Total Credits 60

UNBC

Degree Requirements

Source: http://www.unbc.ca/calendar/undergraduate/programs/university_learning_outcomes.html

Graduates from the University of Northern British Columbia will demonstrate knowledge, skills and abilities appropriate for their degree in the following areas:

1. *Academic breadth and depth*
2. *Analytical, critical, and creative thought*
3. *Liberality, inclusiveness and an appreciation of diversity*
4. *Personal growth, leadership skills and effective communication*
5. *Engaged citizenship from the local to the global level*
6. *Lifelong learning and intellectual development*

Each academic degree Program, individually, is structured so as to address these outcomes.

UNBC Major Lower Level requirements

Source: http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html

100 Level

1. Principles (6)
2. COMM 100 or POLS 100 or INTS 101
3. Math: Finite Math or Linear Algebra AND Calculus (6)

200 Level

4. ECON 202 *History of Economic Thought* (3)
 5. ECON 203 *Canadian Economic History* (3)
 6. Statistics (3)
-

UNBC Joint Major Lower Level requirements

Source: http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html

1. Principles (6)
2. ECON 202 *History of Economic Thought* (3)
3. ECON 203 *Canadian Economic History* (3)
4. Statistics (3)

5. Political Science (15)
-

UNBC Joint Major Lower Level requirements

Source: http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html

Literacy Requirement

1. English (3)
 2. Economics Principles (6)
 3. ECON 202 and ECON 203 (6)
 4. Statistics (3)
 5. Math (24 credits from list)
 6. Computer Science (3)
-

UVIC

Major Lower Level requirements.

Source: <http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html>

1. Economic Principles (3 units)
 2. Math (1.5 units)
 3. English (1.5 units)
 4. Social Science outside Economics (1.5 units)
 5. Intermediate Economics
 6. Statistics (3 units)
 7. ECON 225 (Writing for Economists)
-

UVIC Honours Lower Level requirements

Source: <http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html>

The requirements for the BA Major plus grade requirements and CSC 105 (Computer Science, 1.5 units).

UVIC Sciences Major Lower Level requirements

Source: <http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html>

1. Economic Principles (3 units)
 2. Math (3.0 units)
 3. English (1.5 units)
 4. Social Science outside Economics (1.5 units)
 5. Intermediate Economics
 6. Statistics (3 units)
 7. ECON 225 (Writing for Economists)
 8. Computer Science (1.5 unit)
-

UVIC BSc Honours Lower Level requirements

Source: <http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html>

Grade requirements in addition to the course requirements for the BSc Major:

VIU

BA lower level requirements:

Source:

<http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/index.asp#degreerequirements>

All students in degree programs at VIU are required to complete 6 credits of first-year English composition and literature courses.

1. Any **two** of the following courses:
 - a. ENGL 115* (*University Writing and Research*)
 - b. ENGL 125 (*Literature and Culture*)
 - c. ENGL 135 (*Literature and Criticism*)OR
 - d. ENGL 115 (*University Writing and Research*) and
 - e. ENGL 225 (*Business and Technical Writing*) for programs that require ENGL 225OR
 - f. LBST 111 (*Ways of Knowing I*) and
 - g. LBST 112 (*Ways of Knowing II*)
-

VIU Major Lower Level requirements

Source: <http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/economics.asp>

1. Economic Principles (6 credits)
 2. Statistics (3 credits)
 3. Calculus (3 credits)
 4. English (6 credits)
-