

Economics Flexible Pre-Major  
Analysis Phase II Final Report

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**On Behalf of the**

**Economics Articulation Committee**

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## Section 1: Introduction

This report combines the report on Phase I of the Flexible Pre-Major process with work done in the Phase II process. The items in the first report are reviewed. Some have changed subsequent to the first report, which was submitted at the annual meetings in 2010, and these changes are noted.

The Economics Flexible Pre-Major Analysis project was authorized by the Economics articulation committee in the annual meetings of 2009. A sub-committee of four committee members was struck and an external consultant contracted to steer the project.

The sub-committee's results were presented to the full articulation committee at the annual meetings of 2010, and a further "Phase II" analysis was authorized by the committee. Again, a sub-committee of four was struck and an external advisor contracted. Dr. Peter Wylie continued to chair the sub-committee.

A preliminary draft of the Flexible Pre-Major, with a set of committee members' action items, was presented at the 2011 annual meeting. These action items included reviewing the draft for accuracy, members reporting the draft to their respective institutions, and members forwarding their institution's responses to the analysis sub-committee.

The principal 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.

### Rationale

The goals in creating any FPM include:

1. Minimization of student course duplication and redundancy;
2. Standards agreeably defined and met;
3. 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.

As part of the analysis process, a number of these potential problems were discussed with participating institutions. The results of these discussions are included in the body of this report. It is the opinion of this sub-committee that the remaining problems are not fatal to the Economics FPM.

## Subcommittee

A subcommittee consisting of members of the Economics Articulation Committee has included five people since its original formation. These are

2009 – Present:

- Peter Wylie (UBC-Okanagan): Chair of the Articulation committee and chair of the subcommittee
- Yolina Denchev (Camosun College)

2010 – Present:

- Heinz Nussbaum (Kwantlen Polytechnic University)

2009 – 2010:

- Suzanne von der Porten (Selkirk College)
- Clifford Inimgba (Northern Lights College)

In addition, the three major research universities are represented by resource persons:

- UBC: Hugh Neary
- SFU: Brian Krauth
- UVic: Linda Welling

## Outline of Report

This report follows the general headings in BCCAT's list of deliverables for the FPM analysis project. Section 2 is the proposed Flexible Economics Pre-Major (FPM). The section outlines the FPM's requirements of institutions, cautions for students, the proposed agreement, a listing of specific Principles courses covered by the agreement, and a discussion of some considerations that might be expected in an implementation stage.

Section 3, **Consultative Process**, reviews the data and opinion gathering process that led to this report. It includes a brief discussion of the consultative process, including committee formation and the questionnaires sent to institutions.

Section 4 discusses the **transfer patterns** within BC for the major. While this information is not well tracked<sup>1</sup>, potential patterns are listed. A list of sending and receiving institutions is included. 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 5 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. Judging by the course listings in the BCCAT transfer guide, the content of courses taught at the same level does not appear to be a

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

significant issue<sup>2</sup>. At the heart of program differences is the sequencing of the courses - the level at which courses are being taught. If the FPM is to be implemented, it is this difference that must be addressed.

Section 6 presents some **observations and resultant implications**. The observations are based on both data collected and some anecdotal comments. Lower-level differences between programs result primarily from a few specific courses and from the placement of intermediate theory courses.

The Appendices contain general or background information, as well as previously reported information from the Phase 1 report. Appendices 1 to 3 present the three questionnaires from earlier in the process, with responses and discussion. These were also included in the Phase I report.

Appendix 4 presents each institution's Economics major admission requirements. Appendix 5 presents a table of common courses for the major, as provided by institutions. For general information only, Appendix 6 provides a Mathematics course grid based on the same format, developed by the Mathematics Articulation Committee. Also for general information, Appendix 7 provides a list of Economics major admission requirements by institution. Appendix 8 includes a previously provided discussion on issues and alternatives, updated with comments on previously discussed issues.

Terms and abbreviations as used in this report are defined as follows.

## Definitions

**Associate Degree:** the Associate Degree is a 60 or more credit-hour program designed as a general knowledge/generally transferable program. Variations include Kwantlen Polytechnic University's Associate of Arts (Economics) degree.

**Intermediate:** Intermediate theory courses (Microeconomics and Macroeconomics). These are commonly taught in the second or third year.

**Post-Principles:** Courses taught following the Principles courses in the first or second year.

**Principles:** The first theory courses. They are commonly taught as Microeconomics and Macroeconomics in the first year.

**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.)

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



**Sending Institutions:** Institutions that don't have an economics major but do provide courses transferable to economics majors. (Note that this definition is major-based rather than institution-based.)

## Acronyms

**FPM:** Flexible Pre-Major

### Institutions included or contributing

Alexander	Alexander College
BCIT	British Columbia Institute of Technology
Camosun	Camosun College
Capilano	Capilano University
CNC	College of North Caledonia
Columbia	Columbia College
Coquitlam	Coquitlam College
Corpus Christi	Corpus Christi College
COTR	College of the Rockies
Douglas	Douglas College
FDU	Fairleigh Dickinson University
KPU	Kwantlen Polytechnic University
Langara	Langara College
NIC	North Island College
NLC	Northern Lights College
NWCC	Northwest Community College
OCC	Okanagan College
Quest	Quest University
Selkirk	Selkirk College
SFU	Simon Fraser University
SSDC	Sprott-Shaw Degree College
STMU	St. Mary's University College (Alberta)
TRU	Thompson Rivers University
TWU	Trinity Western University
UBC	University of British Columbia - Vancouver
UBC-O	University of British Columbia – Okanagan
UCW	University Canada West
UFV	University of the Fraser Valley
UNBC	University of Northern British Columbia
UVIC	University of Victoria
VCC	Vancouver Community College
VIU	Vancouver Island University

## Section 2: Proposed Economics Flexible Pre-Major

The proposed FPM (Flexible Pre-Major) is designed to facilitate the planning for transfer purposes of British Columbia students intending to major in Economics.

This section includes the FPM's requirements of institutions, cautions for students, the proposed agreement, a listing of specific Principles courses covered by the agreement, and a discussion of some considerations that might be expected in an implementation stage.

Agreement to implement the FPM involves the following:

### For Institutions:

1. Agreement to accept as transferable those courses listed within the agreement as being part of the Economics Major;
2. Agreement that existing restrictions, limits or other institutional requirements are not waived by FPM;
3. Agreement that reasonable notice will be given to the Economics Articulation Committee and BCCAT when an institution is formally planning to change admission or transfer policies that impact the areas of agreement within the FPM;

### For Students:

The courses included in the FPM are sufficient to partially meet program requirements at signatory institutions. However, the FPM agreement covers only those departmental requirements listed in this agreement. Students are strongly advised to consult calendars or advisors for specific faculty and institutional requirements.

For example, in addition to the core courses listed, UBC requires a second calculus course rather than a statistics course.

### **The Flexible Pre-Major Agreement**

For a college student wishing to proceed to the upper division of a Bachelor of Arts Major in Economics program at a British Columbia university, the Core courses are provided in the table **Core Pre-Major Courses**. The following grid shows how this proposed Flexible Pre-Major program fits into specific Economics Major requirements.

<b>Table 2.1</b>		
<b>Core Pre-Major Courses*</b>		
<b>Principles</b>	Micro	Macro
<b>Post-Principles</b>	Post-Principles I	Post-Principles II
<b>Quantitative</b>	Calculus (Math)	Statistics
*Each course is three credit hours (or equivalent).		

Specific Principles of Economics courses by institution number are presented in Table 2.2.

This **Principles of Economics Grid** shows the Micro and Macro Principles courses offered by each institution. The Post-Principles column indicates which of the (usually) sending institutions offer six or more credits at the Post-Principles level. 16 of the twenty institutions offer sufficient credits.

<b>Table 2.2</b>			
<b>Principles of Economics Grid</b>			
<b>Institutions</b> (Institutions with BA Majors are in <b>Bold</b> )	Numbering of Micro course	Numbering of Macro course	College offers six or more credit hours (equivalent) of Post-Principles (Courses requiring Principles as pre-requisites)
Alexander College	103	105	Yes
British Columbia Institute of Technology	2100	2200	NA
Camosun College	103	104	Yes
Capilano University	111	112	Yes
College of New Caledonia	201	202	NA
Columbia College	103	105	Yes
Coquitlam College	201	202	Yes

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<b>Table 2.2</b>			
<b>Principles of Economics Grid</b>			
<b>Institutions</b> (Institutions with BA Majors are in <b>Bold</b> )	Numbering of Micro course	Numbering of Macro course	College offers six or more credit hours (equivalent) of Post-Principles (Courses requiring Principles as pre-requisites)
Corpus Christi	201	202	No
College of the Rockies	101	102	Yes
Douglas College	1150	1250	Yes
FDU	2001	2102	Yes
KPU	1150	1250	Yes
Langara College	1220	1221	Yes
North Island College	110	111	Yes
Northern Lights Community College	105	102	No
Northwest Community College	150	151	No
Okanagan College	115	125	Yes
Quest University	SOC 2001 + SOC 3001	SOC 2001 + SOC 3002	No
Selkirk College	107	106	Yes
<b>SFU</b>	<b>103</b>	<b>105</b>	
Sprott-Shaw	121	122	
<b>TRU</b>	<b>1900</b>	<b>1950</b>	
TRU-OL	1901	1951	Yes

<b>Table 2.2</b>			
<b>Principles of Economics Grid</b>			
<b>Institutions</b> (Institutions with BA Majors are in <b>Bold</b> )	Numbering of Micro course	Numbering of Macro course	College offers six or more credit hours (equivalent) of Post-Principles (Courses requiring Principles as pre-requisites)
TWU	201	202	
<b>UBC</b>	<b>101</b>	<b>102</b>	
<b>UBC-O</b>	<b>101</b>	<b>102</b>	
UCW	None listed	None listed	
<b>UFV (proposed)</b>	100	101	Yes
<b>UNBC</b>	<b>100</b>	<b>101</b>	
<b>UVIC</b>	<b>103</b>	<b>104</b>	
VCC	1100	1200	No
<b>VIU</b>	<b>211</b>	<b>212</b>	

### Considerations for Implementation

The FPM is designed as an organic agreement. Currently, it is of limited scope but provides the framework for increasing student options. Also, it comes with no inherent limits for future expansion in either course offerings or other Economics Majors.

Should the Articulation Committee decide to proceed with the FPM:

1. Since the agreement binds only the signatory institutions, members should ensure that all necessary authorizations are in place;
2. A protocol is required to:

- a. Assess later applicants to an existing FPM such as other BC institutions or institutions from outside BC. For example, non-signatories might respect the agreement for their incoming students. However, signatories might not be inclined to reciprocate.
    - b. Keep students informed of any lack of reciprocation.
  3. Since the FPM exists in the context of institutions' policies, plans, funding and forecasts (e.g. UBC, in its *Report on Annual Enrolment*, forecasts a reduction in the number of transfers accepted) , Economics Articulation Committee members must be notified of any institutional changes that might affect the FPM, and must inform the membership of any such changes at their own institution. This is an issue that the Economics Articulation Committee has always handled well, so this item is a confirmation of continuance and not a change.
  4. Some individual institutional blockages remain. In particular, students need to be informed that SFU's economics major admission requirement of one term's SFU GPA will remain in place, and transfer credit toward its economics major cannot happen before the student is accepted into the major.
  5. Additional potential blockages may exist at individual institutions. These blockages were in the area of specific non-transferable courses required by the receiving institutions. In conversations, it was noted that students could take these courses following acceptance; this will need confirmation during the implementation process.
  6. Additional majors are expected to be developed. For example, UFV is planning to implement an Economics major by 2012. Because of this and other potential future changes, the implementation process will require a discussion leading to a protocol in handling new majors.
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### Section 3: Consultative Process

This section briefly reviews the consultative process leading to the FPM proposal. These include meetings, significant correspondence and questionnaires. The initial consultations were presented in the Phase I Report. These are reviewed, and subsequent events are discussed.

#### Initial Consultations

2008 April 28: The Economics FPM analysis project was initially authorized by the Economics Articulation Committee during the 2008 Economics Articulation Committee 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 creating the subcommittee was passed.

2009 April 27: Three Economics Articulation Committee members (Yolina Denchev, Clifford Inimgba, and Suzanne Vonder Porten) volunteered<sup>3</sup> to be on the subcommittee. Dr. Bradley Krause of Bradley Krause and Associates Inc. 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 was appointed as an ex-officio member of the subcommittee.

The initial meeting of the subcommittee was August 26, 2009. The members have met periodically since.

*Three questionnaires* were developed by the subcommittee. The first questionnaire was intended to assess both interest in and obstacles to the FPM. The second and third questionnaires followed up to identify specific issues that might affect the FPM process.

#### Questionnaire #1

The first questionnaire was designed at the August 2009 meeting of the subcommittee. The questionnaire was edited during early September, and a final version was emailed to all Economics Articulation Committee members on September 18<sup>4</sup>.

The purposes of the first questionnaire were:

1. To gauge general interest in the project (measured by response rates);
2. To assess transfer patterns (Section A.9 to A.13; Section B.9; Section C.2 to C.12);
3. To determine the purposes of the Economics degree (Section A.4);
4. To gain some general information regarding the Economics degree and Economics programs (Section A. 5 to A.8);
5. To determine any other issues that may affect a potential FPM (Section A.11 to A.14; Section C. 4 to C.14).

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<sup>3</sup> In June, Suzanne VonderPorten was replaced by Heinz Nussbaum of KPU.

<sup>4</sup> The questionnaire is reproduced in Appendix 1.A.

### *Responses to Questionnaire #1*

There are different questionnaire response rates from the sending and the receiving institutions – possibly due to different levels of interest in the FPM. 19 of the 25 sending institutions responded, for a response rate of 76%. The receiving institution response rate was considerably lower, at 43%<sup>5</sup>.

It is recognized that receiving institutions may have less motivation to implement the FPM than sending institutions. However, in subsequent articulation committee meetings (2010 and 2011), follow-up emails, telephone conversations and in-person interviews, all receiving institutions indicated their interest in continuing with the FPM analysis process.

The questionnaire was useful to direct the sub-committee. The response rate indicated general interest in the FPM, and the questions on the purpose of Economics degrees and general information helped focus subsequent questionnaires. It was also determined that admission policies were generally not obstacles to creating or implementing an Economics FPM.

### Questionnaire #2

In December 2009, Questionnaire #2 was designed and emailed. It was intended to determine (a) both the purpose and extent of agreement of course content and course placement by year, and (b) the amount of control that Economics departments have in determining course requirements.

### *Responses to Questionnaire #2*

Six of seven institutions responded. The responses indicated disagreement around some course placements. Differences in the treatment of the Intermediate Theory courses motivated Questionnaire #3.

Responses to Questionnaire #2 also indicated that changes addressing these areas of disagreement are within the control of the departments, and need not involve the broader faculty or the university as a whole.

### Questionnaire #3

This questionnaire was sent in January and attempted to determine the relative size of different Economics majors within each institution, and the transferability of 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 responses to the second part of the questionnaire – the transferability of the Intermediate Theory courses – indicates that only UBC refused any economics transfer credit for Intermediate Theory. As

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<sup>5</sup> See Appendix 1.B for a table of responses.



reported in the Phase I Report, SFU grants general transfer credit for Intermediate Theory courses taken elsewhere, but requires the Intermediate courses to be taken at SFU. Both UBC and SFU describe their Intermediate Theory courses as important in defining their degrees.

Subsequent to the Phase I Report, SFU announced a change in their Intermediate Micro course. In July, 2011, SFU announced that the course will be split into separate 200- and 300-level components. The new course is scheduled to be offered in fall of 2012. Each component is four credit hours.

### **Subsequent Consultations**

All institutions have been consulted via in-person meetings, email or telephone. The committee chair has spoken directly to all institutional representatives. The discussions have focused on each institution's primary concerns and requirements.

The FPM subcommittee has met both in-person and electronically.

At the 2011 May meetings, the following steps were proposed and agreed (subsequent actions in brackets):

1. Agreement to move forward with the FPM Analysis process. (A draft report was distributed to members for their review, comments and corrections.)
2. May: Committee members to report to their institutions during the summer.
3. June 30<sup>th</sup>: Committee members to inform the subcommittee of any additional recommendations, restrictions or directions from their institutions. (Several members sent comments and corrections. These are incorporated in the document. In addition, SFU reported a proposed change to their major. This change - moving part of Intermediate Micro to second year from third - will make FPM implementation easier. Additionally, UFV confirmed that its proposed major is likely to be implemented.)
4. July 31: Drafting and submission of the final Phase 2 Report to the Articulation committee members.
5. August 30: Email approval of the Phase 2 Report. If approved, then:
6. August 31: Email approval to submit an Implementation Proposal to the BCCAT Transfer and Articulation Committee (TAC). If agreed, then:
7. September 15: Submission of an Implementation Proposal to the TAC.
8. Following the BCCAT TAC meetings: Notification to members of the board's decision. If the Implementation proposal is approved then:
9. Proceed to implementation.

## **Section 4: Current Transfer Patterns in Economics**

An Economics major is offered at seven BC institutions.<sup>6</sup> 21 programs include an Economics major. Table 4.1 lists the institutions, the degrees offered by each, and the type of major. Each institution is listed along with a link to the website outlining the institution’s requirements.

The types of majors identified are Major, Honours, Joint and Business (BComm or BBA). The requirements for each can be reviewed on each institution’s website, as linked. A summary of the requirements for each degree is provided in Appendix #4.

Table 4.1 shows three types of degree requirements – institutional, faculty and program. For example, each institution has requirements that govern all degrees; each faculty also has its own requirements, as does each program. The requirements are provided in Appendix 4 or can be accessed directly from the linked documents.

<b>Table 4.1<sup>7</sup></b>			
<b>Institutions offering Economics Majors, and Degrees Offered</b>			
Institution	Degree	Type	Summary Sources (URL`s)
<b>SFU</b>			<a href="http://www.sfu.ca/arts/current/WQB.html">http://www.sfu.ca/arts/current/WQB.html</a>
1.1 SFU	BA	Major	<a href="http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/MajorProgram.html">http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/MajorProgram.html</a>
1.2 SFU	BA	Honours	<a href="http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/HonoursProgram.html">http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/HonoursProgram.html</a>
1.3 SFU	BA or BBA	Joint Major with Business	<a href="http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/JointMajorwithBusinessAdministration.html">http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/JointMajorwithBusinessAdministration.html</a>
<b>TRU</b>			<a href="http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm">http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm</a>
2.1 TRU	BA	Major	<a href="http://www.tru.ca/business/economics/programs/bamajor.html">http://www.tru.ca/business/economics/programs/bamajor.html</a>
2.2 TRU	BA	Joint Major: Economics and Political Science	<a href="http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm">http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm</a>
2.3 TRU	BBA	Major or Concentration	<a href="http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm">http://www.tru.ca/calendar/current/index.htm?http://www.tru.ca/calendar/current/548.htm</a>

<sup>6</sup> An eighth institution, UFV, is planning to offer a major beginning in 2012.

<sup>7</sup> The table is based on each institution’s economics requirements as posted on their respective web pages.

<b>Table 4.1<sup>7</sup></b>			
<b>Institutions offering Economics Majors, and Degrees Offered</b>			
<b>Institution</b>	<b>Degree</b>	<b>Type</b>	<b>Summary Sources (URL`s)</b>
<b>UBC</b>			<a href="http://www.students.ubc.ca/calendar/index.cfm?tree=12,197,282,55">http://www.students.ubc.ca/calendar/index.cfm?tree=12,197,282,55</a>
3.1 UBC	BA	Major	<a href="http://www.econ.ubc.ca/majors/prog.htm">http://www.econ.ubc.ca/majors/prog.htm</a>
3.2 UBC	BA	Honours	<a href="http://www.econ.ubc.ca/majors/hon.htm">http://www.econ.ubc.ca/majors/hon.htm</a>
3.3 UBC	BComm	Major	<a href="http://www1.sauder.ubc.ca/Programs/Bachelor_of_Commerce/Program_Overview/Requirements/~media/Files/BCom/Worksheets/DECommerceEcon.ashx">http://www1.sauder.ubc.ca/Programs/Bachelor_of_Commerce/Program_Overview/Requirements/~media/Files/BCom/Worksheets/DECommerceEcon.ashx</a>
3.4 UBC	BA	Joint with: Philosophy, Political Science Math Statistics	<a href="http://www.econ.ubc.ca/majors/cmphil.htm">http://www.econ.ubc.ca/majors/cmphil.htm</a> <a href="http://www.econ.ubc.ca/majors/cmpoli.htm">http://www.econ.ubc.ca/majors/cmpoli.htm</a> <a href="http://www.econ.ubc.ca/majors/cmmath.htm">http://www.econ.ubc.ca/majors/cmmath.htm</a> <a href="http://www.econ.ubc.ca/majors/cmstat.htm">http://www.econ.ubc.ca/majors/cmstat.htm</a>
<b>UBC-O</b>			<a href="http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,1084#12398">http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,1084#12398</a>
4.1 UBC-O	BA	Major	<a href="http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,980">http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,980</a>
4.2 UBC-O	BA	Joint Major (Philosophy, Political Science and Economics)	<a href="http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,1255#14638">http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,857,1255#14638</a>
4.3 UBC-O	BSc	Major	<a href="http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,858,1224#14678">http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,282,858,1224#14678</a>
<b>UNBC</b>			<a href="http://www.unbc.ca/calendar/undergraduate/programs/university_learning_outcomes.html">http://www.unbc.ca/calendar/undergraduate/programs/university_learning_outcomes.html</a>
5.1 UNBC	BA	Major	<a href="http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html">http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html</a>
5.2 UNBC	BA	Joint Major with Political Science	<a href="http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html">http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html</a>
5.3 UNBC	BSc	Joint Major with Mathematics	<a href="http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html">http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html</a>

<b>Table 4.1<sup>7</sup></b>			
<b>Institutions offering Economics Majors, and Degrees Offered</b>			
<b>Institution</b>	<b>Degree</b>	<b>Type</b>	<b>Summary Sources (URL`s)</b>
<b>UVIC</b>			
6.1 UVIC	BA	Major	<a href="http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html">http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html</a>
6.2 UVIC	BA	Honours	<a href="http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html">http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html</a>
6.3 UVIC	BSc	Major	<a href="http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html">http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html</a>
6.3 UVIC	BSc	Honours	<a href="http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html">http://web.uvic.ca/calendar2009/FACS/FoSoS/DoEc/PrRe.html</a>
<b>VIU</b>			<a href="http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/index.asp#degreerequirements">http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/index.asp#degreerequirements</a>
7.2 VIU	BA	Major	<a href="http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/economics.asp">http://www.viu.ca/calendar/UniversityDegreeCompletion/bamajorsminors/economics.asp</a>

### **Types of Majors**

There are four types of Economics majors: within Arts degrees (“Arts”), within Science degrees (“Science”), joint and honours. Table 4.2 indicates that all institutions with an Economics major have the major within the Arts degree. In addition, three universities have honours degrees, which for each is a completion of the major along with additional course requirements. The entry to an honours program occurs after lower-level courses are complete, and acceptance is primarily a function of grades earned to that point in the program.

UBC-O, UNBC and UVIC also have an Economics major within a Science degree. 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 SFU, UBC and UVIC have the bulk (89%) of the province’s Economics majors.

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<b>Table 4.2</b>								
<b>Majors and Enrolment by Institution<sup>8</sup></b>								
Institutions	SFU	TRU	UBC	UBC-O	UNBC	UVIC	VIU	Totals
Major (Arts)	850	20 – 24	482	60	30	206	10 to 15	1660
Major (Science)				15	4	83		102
Honours	30		28			8		66
Joint Majors		16	64	18	30			128
Joint Major with Business (or BBA)		20 – 24					5	27
<b>Totals</b>	<b>880</b>	<b>60</b>	<b>574</b>	<b>93</b>	<b>64</b>	<b>297</b>	<b>15</b>	<b>1983</b>
% in Arts Major	96.6%	36.7%	84%	64.5%	46.9%	69.4%	66.7%	83.8%
% in Major + Honours	100%	36.7%	88.9%	64.5%	46.9%	72.1%	66.7%	87.2%
Institution as % of total	44.7%	3%	29.2%	4.7%	3.25%	15.1%	<1%	
Economics majors were part of Arts degrees at 83.8% of the institutions responding. If the honours are included as part of the major, the number rises to 87.2%.								

<sup>8</sup> Data based on the 2009 survey.

## Section 5: 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, identifying some of the differences and determining their importance might indicate where changes are required to facilitate a common flexible pre-major. The assessment of those differences also might indicate whether a flexible pre-major is possible.<sup>9</sup>

Table 5.1 displays the lower-level Economics major requirements in Arts degrees at each institution by the number of credit hours, credits or units.

Table 5.1 Lower-Level Requirements <sup>10</sup>								
Institutions		SFU	TRU	UBC	UBC-O	UNBC	UVIC <sup>1</sup>	VIU
<b>Economics Major (Arts)</b>								
1.	Economics -- Principles	8	6	6	6	6	3	6
2.	Economics – Post Principles	6		6		6 <sup>2</sup>		
3.	Economics -- Intermediate		6		6		3	6
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 <sup>3</sup>		
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			
<sup>1</sup> UVIC's unit system uses numbers that are half of the credits at the other institutions. For example, 3 UVIC units equal 6 VIU credits. <sup>2</sup> UNBC requires <i>History of Economic Thought and Canadian Economic History</i> as the Post Principles. <sup>3</sup> According to the BC Transfer Guide, UVIC requires <i>Econ 225</i> to be taken at UVIC.								

The BC Transfer Guide indicates that the Principles courses are standard across all institutions.<sup>11</sup>

<sup>9</sup> In the discipline of Economics, this is known as Marginal Analysis.

<sup>10</sup> The table is based on each institution's Economics major requirements as posted on its website.

The Post—Principles requirements are different between institutions. SFU and UBC require six hours of second or third year Economics courses; UNBC requires two specific courses (History of Thought and Canadian Economic History). Differences also exist in the location of the Intermediate Theory courses. TRU, UBC-O and UVIC require Intermediate Theory in the lower levels; elsewhere, they are upper level courses.

SFU's, UVIC's and VIU's mathematics requirements are half that of the others, and Statistics requirements vary from none to 4 hours. All programs require Literature and Writing intensive courses. UVIC is the only institution to specify a particular writing course, ECON 225 (Writing for Economists), which does not articulate within the transfer system. 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 on course content and placement. A set of statements was provided and respondents were asked to indicate agreement or disagreement, and to comment as necessary. Responses by institution are shown in Table 5.2.

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

There was disagreement in the responses to the statement *"The purpose of the Intermediate theory courses is to increase competency in understanding and application of economic theory"*. SFU describes its Intermediate courses as the "defining core of the program." Four of five respondents disagreed with the statement *"The Intermediate theory courses taught by members of the BC transfer system are essentially the same"*.

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<sup>11</sup> <http://bctransferguide.ca>

There was also disagreement with the statement “*Calculus is essential to understanding Intermediate theory.*” 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.

Only one respondent disagreed with the statement “*Statistics is essential prior to attempting upper level Economics courses*” but all agreed with the usefulness of statistics training.

<b>Table 5.2</b>							
<b>Responses to Items on Questionnaire #2</b>							
	SFU	TRU	UBC	UBC-O	UNBC	UVIC	VIU
Purpose of 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 mathematics/statistics requirements seem related to the location of the Intermediate Theory courses. This suggests that if the Intermediate Theory courses are not part of a FPM, then additional mathematics and statistics courses must be included.



## Section 6: Observations and Issues

This section outlines some of the issues brought to the subcommittee's attention. The issues are categorized with resulting FPM implications and notes on discussions and conclusions subsequent to the Phase I Report.

### Scope

Approximately 87% of students in Economics majors are Economic majors in Arts degree programs, including honours programs.

**Implication:** It is probably advisable to limit the FPM discussion to Economic majors in Arts degrees. (Table 3.2)

**Subsequent discussions:** It was agreed by the Economics Articulation Committee to limit the FPM discussions to Arts (Annual meeting, 2009).

### 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.

**Subsequent Discussions:** UBC and SFU continue to dominate the Economics Major by enrolment. An Economics FPM might be of more value for other providers.

### Standards of BC Universities

Ratings agencies consistently place UBC, SFU and UVIC in the top tiers of international universities.<sup>12</sup> Further, the Academic Ranking of World Universities ranking of Social Sciences has both UBC and SFU in the top 100.

The methodologies of these rankings 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 flexible pre-major program to emulate our local world leaders.

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<sup>12</sup> 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.

## Transfer Patterns

Anecdotal information suggests that there are two types of transfer movement within Economics – provincial transfers, with UBC and SFU being the primary magnets, and regional transfers within 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 or regional institution for transfer.

## Distinctive Courses

Distinctive courses are required by both UVIC and UNBC. UVIC's writing course is not articulated elsewhere, and UNBC has specific courses required for its post-principles courses.

**Implication:** Entrenched positions here might pose difficulties to implementing a province-wide 60-credit FPM.

**Subsequent Discussions:** These particular courses may be taken following admission to the two institutions and need not impede the proposed FPM.

## Writing requirements

There are some differences between each major's English requirements of literature and/or writing courses.

**Implication:** The writing and literature components of the FPM may need specification.

**Subsequent Discussions:** The writing and literature components of the proposed FPM are listed in this report. It is not required that these components be included in the FPM at this time.

## 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 non-trivial differences in content.

**Implications:**

- Delaying the Intermediate courses at institutions where intermediate is taught in lower levels may handicap transfer students.
- Prerequisites for Intermediate courses differ depending on level.

**Subsequent Discussions:** SFU is moving part of its Intermediate Theory course to second year, thus expanding transfer options for students.

## General Notes

- It may be that a useful FPM can only be devised without including all institutions.
- SFU has a SFU-GPA requirement for admission to the Economics major. Applicants for the major require at least one semester's GPA at SFU. This requires at least one term of coursework at SFU prior to admission to the Economics major.

## Section 6: Appendices

- Appendix 1: Questionnaire #1
- Appendix 2: Questionnaire #2
- Appendix 3: Questionnaire #3
- Appendix 4: List of Economics Major Admission requirements by Institution.
- Appendix 5: Common Courses
- Appendix 6: Mathematics Course Grid
- Appendix 7: Faculties of Arts Degree Requirements
- Appendix 8: An Assessment of Issues and Alternatives

## 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.

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### 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](mailto: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.

<b>Table A1.1</b>		
<b>Sending Institutions Responding to Questionnaire #1</b>		
<b>Sending Institutions</b>	<b>Responded</b>	<b>Did not Respond</b>
Alexander	•	
BCIT		•
Camosun	•	
Capilano	•	
CNC		•
Columbia	•	
Coquitlam	•	

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<b>Table A1.1</b>		
<b>Sending Institutions Responding to Questionnaire #1</b>		
<b>Sending Institutions</b>	<b>Responded</b>	<b>Did not Respond</b>
Corpus Christi	•	
COTR	•	
Douglas	•	
FDU	•	
KPU	•	
Langara	•	
NIC	•	
NLC		•
NWCC		•
OC		•
Quest	•	
Selkirk	•	
SSDC	•	
STMU	•	
TWU	•	
UCW	•	
UFV	•	
VCC		•
<b>Number of Sending Institutions Contacted</b>	<b>19</b>	<b>6</b>
<b>Response Rate</b>	<b>76%</b>	

<b>Table A1.2</b>		
<b>Receiving Institutions Responding to Questionnaire #1</b>		
<b>Receiving</b>	<b>Responded</b>	<b>Did not Respond</b>

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Institution		
SFU	•	
TRU		•
UBC	•	
UBC-O	•	
UNBC		•
UVIC		•
VIU		•
<b>Number of Receiving Institutions Contacted</b>	<b>3</b>	<b>4</b>
<b>Response Rate</b>	<b>43%</b>	



## Appendix 2: FPM 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:

<b>Table A2.1</b>	
<b>Receiving Institutions Responding to Questionnaire #2</b>	
Receiving Institutions	Responded
SFU	Yes
TRU	Yes
UBC	Yes
UBC-O	Yes
UNBC	Yes
UVIC	No
VIU	Yes
<b>Total Receiving</b>	<b>6</b>
<b>Response Rate</b>	<b>85.7%</b>

<b>Table A2.2</b>							
<b>Responses to Questions</b>							
	SFU	TRU	UBC	UBC-O	UNBC	UVIC	VIU
<b>Purpose and Agreement on Courses</b>							
Q1: Principles	Agree	Agree	Agree	Agree	Agree		Agree
Q2: Principles (sameness)	Agree	Agree	Agree	Agree	Agree		Agree
Q3: Post-Principles	Agree	Agree	Agree	Agree	Agree		Agree
Q4: Intermediate	Disagree	Agree	Disagree	Agree	Agree		Agree
Q5: Intermediate (sameness)	Disagree	Disagree	Disagree	Agree	Disagree		Disagree
Q6: Calculus	Agree	Agree (Micro) Disagree (Macro)	Agree	Disagree	Agree		Disagree
Q7: Statistics	Agree	Agree	Agree	Disagree	Agree		Agree
<b>Control of Requirements</b>							
Q8.a: Principles	Agree	Agree	Agree	Agree	Agree		Agree
Q8.b: Post-	Agree	Disagree	Agree	Agree	Agree		Agree

<b>Table A2.2</b>							
<b>Responses to Questions</b>							
	<b>SFU</b>	<b>TRU</b>	<b>UBC</b>	<b>UBC-O</b>	<b>UNBC</b>	<b>UVIC</b>	<b>VIU</b>
<b>Principles</b>							
<b>Q8.c: Intermediate</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>		<b>Agree</b>
<b>Q8.d: Mathematics</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>		<b>Agree</b>
<b>Q8.e: Statistics</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>	<b>Agree</b>		<b>Agree</b>
<b>Q8.f: English Literature</b>	<b>Disagree</b>	<b>Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Agree</b>		<b>Agree?</b>
<b>Q8.g: English Writing</b>	<b>Disagree</b>	<b>Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Agree</b>		<b>Agree?</b>
<b>Q8.h: Social Science</b>	<b>Disagree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Disagree</b>	<b>Agree</b>		<b>Agree?</b>
<b>Q8.i: Science</b>	<b>Disagree</b>	<b>None?</b>	<b>Disagree</b>	<b>Disagree</b>	<b>NA</b>		<b>Disagree</b>

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<b>Table A2.3</b>					
<b>Students in Each Type of Program/Institution</b>					
	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Totals
<b>BA</b>					
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					
<b>Total BA</b>					1650
<b>BA Honours</b>					
SFU			15	15	30
UBC			12	16	28
UVIC					3
<b>Total BA Honours</b>					61
<b>BSc</b>					
UBC-O		10	4	1	15
UNBC			2	2	4
UVIC					83
<b>Total BSc</b>					102
<b>BSc Honours</b>					
UBC-O					
UVIC					5
VIU					
<b>Total BSc Honours</b>					5
<b>BBA or BComm</b>					
SFU					
TRU			10 – 12	10 – 12	20 – 24
UBC					
<b>Total BBA or BComm</b>					
<b>Joint Majors (other than business or commerce)</b>					
TRU			8	8	16
UBC			31	33	64
UBC-O (PPE)			8	10	18
UNBC			15	15	30
<b>Total Joint Majors</b>					

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<b>Totals:</b>					
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**Appendix 3: FPM Questionnaire #3**

1. For institutions where intermediate is a third year subject, how are 2<sup>nd</sup> year transfers of intermediate handled?
  - a. Credit given at 3<sup>rd</sup> year?
  - b. Credit given for 2<sup>nd</sup> year elective (UBC-O, )  
or general credit and
    - i. Intermediate at 3<sup>rd</sup> year must be taken? (SFU,
    - ii. Intermediate at 3<sup>rd</sup> year may not be taken?
  - c. No credit given?
  - d. Other \_\_\_\_\_

<b>Table A3.1</b>		
<b>Receiving Institutions' Responses to Questionnaire #3</b>		
Receiving Institutions	Initial Response	Credit for Intermediate
SFU	Yes	2 <sup>nd</sup> 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		Case by case
<b>Total Responses</b>	<b>5</b>	
<b>Response Rate</b>	<b>71%</b>	

## 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 purposes of readability only.

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### 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, undesigntated) –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.*

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#### Economics Major Lower Level Requirements

Source: [http://www.econ.sfu.ca/Undergraduate\\_Program/DegreesandPrograms/MajorProgram.html](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

---

#### Honours Lower Level Requirements

Source: [http://www.econ.sfu.ca/Undergraduate\\_Program/DegreesandPrograms/HonoursProgram.html](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.

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### Joint Major with Business

Source:

[http://www.econ.sfu.ca/Undergraduate\\_Program/DegreesandPrograms/JointMajorwithBusinessAdministration.html](http://www.econ.sfu.ca/Undergraduate_Program/DegreesandPrograms/JointMajorwithBusinessAdministration.html)

These requirements are the same as those for the [Economics major](#) and the Business Administration major.

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## 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.

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### Economics Major Lower Level Requirements

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

#### **Required Economic courses**

ECON 190: Introduction to Microeconomics

ECON 195: Introduction to Macroeconomics



*ECON 290: Intermediate Microeconomic I*  
*ECON 295: Intermediate Macroeconomics I*  
*BUEC 232: Statistics for Business and Economics I*

**Required Mathematics courses**

a. One of the following sequences: MATH 140 and 141; or MATH 117 and 124; or equivalent

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**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>

*MATH 117 or MATH 114*  
*BUEC 232 Economic and Business Statistics 1*  
*ECON 190 Principles of Microeconomics*  
*ECON 195 Principles of Macroeconomics*  
*ECON 290 Intermediate Microeconomics 1*  
*ECON 295 Intermediate Macroeconomics 1*  
*POLI 111 The Government and Politics in Canada*  
*POLI 121 Contemporary Ideologies*

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**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, and (6 credits)*
4. *Literature Requirement (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.*

---

### Economics 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.*

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

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

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### UBC BComm Lower Level requirements

**Source:**

[http://www1.sauder.ubc.ca/Programs/Bachelor\\_of\\_Commerce/Program\\_Overview/Requirements/~media/Files/BCom/Worksheets/DECommerceEcon.ashx](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;*

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### 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.**

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### **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.

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#### UBC-O Major Lower Level requirements

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

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

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#### UBC-O Philosophy, Political Science and Economics Lower Level Requirements

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

*ECON 101, 102;  
One of ECON 204, 205;  
One of PHIL 111, 121;  
One of PHIL 120, 220;  
PHIL 230;  
POLI 101, 220, 240;  
STAT 121.*

---

#### UBC-O Science Major Lower Level requirements

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

*ECON Principles (6 credits)  
MATH 100, 101 (6 credits)  
CHEM 121, 123; or CHEM 111, 113 (6 credits)  
PHYS 112, 122; or PHYS 102, 111 (6 credits)  
Two of ENGL 112, 113, 114, 150, 151, 153 (6 credits)  
Two of ASTR 110, 120, 111, 121; BIOL 116, 125; COSC 111, 121, 122; EESC 111, 121; GEOG 108, 109  
(6 credits)  
ECON 204, 205 (6 credits)  
MATH 200, 221 (6 credits)  
STAT 230, 240 (6 credits)  
Electives (6 credits)  
**Total Credits 60***

---

## UNBC

### Degree Requirements

Source: [http://www.unbc.ca/calendar/undergraduate/programs/university\\_learning\\_outcomes.html](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.*

---

**Economics Major Lower Level Requirements**

Source: [http://www.unbc.ca/calendar/undergraduate/undergraduate\\_programs/economics.html](http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html)

**100 Level**

Principles (6)

COMM 100 or POLS 100 or INTS 101

Math: Finite Math or Linear Algebra AND Calculus (6)

**200 Level**

ECON 202 History of Economic Thought (3)

ECON 203 Canadian Economic History (3)

Statistics (3)

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**Joint Major (Economics/International Studies) Lower Level Requirements**

Source: [http://www.unbc.ca/calendar/undergraduate/undergraduate\\_programs/economics.html](http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html)

Principles (6)

ECON 202 History of Economic Thought (3)

ECON 203 Canadian Economic History (3)

Statistics (3)

Political Science (15)

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**Joint Major (Economics/Political Science) Lower Level Requirements**

Source: [http://www.unbc.ca/calendar/undergraduate/undergraduate\\_programs/economics.html](http://www.unbc.ca/calendar/undergraduate/undergraduate_programs/economics.html)

Literacy Requirement

English (3)

Economics Principles (6)

ECON 202 and ECON 203 (6)

Statistics (3)

Math (24 credits from list)

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) (1.5 units)

---

#### Honours Lower Level Requirements

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

These includes the requirements for the BA Major plus GPA grade requirements in specific courses and CSC 105 (Computers and Information Processing, 1.5 units).

---

#### Science Degree Economics 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) (1.5 units)
8. Computer Science (1.5 units)

---

#### Science Degree Economics Honours Lower Level Requirements

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

These include GPA requirements in addition to the course requirements for the BSc Economics major.

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## 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)
- 

#### Economics Major Lower Level Requirements

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

Economic Principles (6 credits)  
Statistics (3 credits)  
Calculus (3 credits)  
English (6 credits)

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**Appendix 5: Common Courses**

As part of the analysis, areas of common material coverage between institutions' Economics major were examined. The common areas are listed in Table A5.1. The "frequency" column indicates that all institutions providing the Economics major provide the transferable courses covered by the proposed FPM.

<b>Table A5.1</b>									
<b>Common Courses offered to fulfill FPM requirements</b>									
Requirements	SFU	TRU	UBC	UBC-O	UFV	UNBC	UVIC	VIU	Fre- quency
<b>Economics Courses</b>									
Micro Principles	ECON 103	ECON 1900	ECON 101		ECON 100	ECON 100	ECON 103	ECON 211	8
Macro Principles	ECON 105	ECON 1950	ECON 102		ECON 101	ECON 101	ECON 104	ECON 212	8
Post Principles I	Large variety including Intermediate	ECON 2900	Large variety of 200 and 200+ level courses		ECON 215	ECON 202, 203, 205	Various numbered at 300+	Various elective courses numbered at the 300 level	8
Post Principles II	Micro (1) (proposed)	ECON 2950	Large variety of 200 and 200+ level courses		Various numbered at 300+	ECON 202, 203, 205			8
<b>Mathematics and Statistics Courses</b>									
Statistics I	BUEC 232 or STAT 270	BUEC 2320	ECON 325 (UBC) ECON 327 (UBCO)		Bus 149 or MATH 104 or MATH 106 or MATH 270	ECON 205	ECON 245	MATH 161, 181, 211, QUME 232	8



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<b>Table A5.1</b>									
<b>Common Courses offered to fulfill FPM requirements</b>									
Math I	MATH 157	MATH 1170 or 1140	MATH 104	MATH 100 or 116	MATH 111 or MATH 115 or MATH 141	MATH 150 or 220	MATH 102 or 100	MATH 191, 121, 100	8
Math II	MATH 158		MATH 105	MATH 101 or 142		MATH 100 or 152		MATH 122?	6

**Appendix 6: Mathematics Grid**

The Mathematics grid was developed by the Mathematics Articulation Committee and is focused on the Mathematics rather than foundation (field) courses. The grid is included here in part to facilitate the possible FPM implementation phase. As part of that phase, additional grids and agreement will be required to address other courses and subject areas such as Statistics.

The columns titled Calculus I and Calculus II are from the Math Grid. The columns titled “Math I” and “Math II” include the equivalent courses listed for the Economics Major at each institution, with the equivalence to the Math Grid courses either inferred from or stated on either each institution’s course list or the BC Transfer Guide.

<b>Table A6.1 Mathematics Grid</b>				
Institution	Mathematics Articulation Committee Grid*		Currently Required as per Transfer Guide to Majors	
	Calculus I	Calculus II	Math I	Math II
Alexander College	MATH 151	MATH 152	Math 104	Math 105
British Columbia Institute of Technology	MATH 1100	MATH 2100		
Camosun College	MATH 100	MATH 101	Math 108	
Capilano University	MATH 116	MATH 126	Math 108	Math 109
College of New Caledonia	MATH 101	MATH 102		
College of the Rockies	MATH 103	MATH 104		
Columbia College	MATH 113	MATH 114		

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<b>Table A6.1</b>				
<b>Mathematics Grid</b>				
Institution	Mathematics Articulation Committee Grid*		Currently Required as per Transfer Guide to Majors	
	Calculus I	Calculus II	Math I	Math II
Coquitlam College	MATH 101	MATH 102		
Corpus Christi				
Douglas College	MATH 1120 or MATH 1125	MATH 1220		
Fairleigh Dickinson University			QUANT 1239 or EGTG 2201	EGTG 2202
Kwantlen Polytechnic University	<b>MATH 1120</b>	<b>MATH 1220</b>	MATH 1140	MATH 1240
Langara College	MATH 1171	MATH 1271		
North Island College	MAT 181	MAT 182		
Northern Lights College	MATH 101	MATH 102		
Northwest Community College	MATH 101	MATH 102		
Okanagan College	MATH 112	MATH 122		
Quest University			MAT3101	MAT 3101
Selkirk College	MATH 100	MATH 101		
<b>SFU</b>	<b>MATH 151</b>	<b>MATH 152</b>	<b>MATH 157</b>	<b>MATH 158</b>
SSDC				
<b>TRU</b>			<b>MATH 1400</b>	

<b>Table A6.1</b>				
<b>Mathematics Grid</b>				
Institution	Mathematics Articulation Committee Grid*		Currently Required as per Transfer Guide to Majors	
	Calculus I	Calculus II	Math I	Math II
TRU-OL		<b>MATH 1241</b>	MATH 1171	
TWU			MATH 120	
<b>UBC</b>	<b>MATH 100</b>	<b>MATH 101</b>	<b>MATH 104</b>	<b>MATH 105</b>
<b>UBC-O</b>			<b>MATH 100 or 116; and</b>	<b>MATH 101 or 142;</b>
UCW				
UFV	Math 111	Math 112	MATH 141 (or MATH 115)	
<b>UNBC</b>	<b>MATH 100</b>	<b>MATH 101</b>	<b>MATH 150 or 220</b>	<b>MATH 100 or 152</b>
<b>UVIC</b>	<b>MATH 100</b>	<b>MATH 101</b>	<b>MATH 102 or 100</b>	
Vancouver Community College	MATH 1100	MATH 1200		
<b>VIU</b>	<b>MATH 121</b>	<b>MATH 122</b>		
Yukon College	MATH 100	MATH 101		
*Items in bold are inferred from the published grid.				

**Appendix 7: Faculties of Arts Degree Requirements**

General Arts degree requirements are outside the FPM agreement. The following table is presented for general information only.

Note that all institutions except for UNBC permit the possible number of lower level credits to exceed 60 credits (30 units for UVIC). The implication for students is that some of the lower level course requirements for programs can be met at the accepting university without compromising the (usual) limit of 60 transfer credits.

Table A7.1 Faculty of Arts Requirements								
Degree Requirements	SFU	TRU	UBC	UBC-O	UFV	UNBC	UVIC	VIU
Minimum Upper Level Credits	45	48	48	48	45	36	21 units	42
Lower Level Credits Possible	75	72	72	72	75	84	39 units	78
Breadth Requirement	18 units outside of major + 6 additional (non-designated)				30 credits in five or more subject areas outside the major	One course from: ENGL, HIST, PHIL, WMST		Any <b>two</b> of the following courses (6 credits): ENGL 115* (University Writing and Research) ENGL 125 (Literature and Culture) ENGL 135 (Literature and Criticism) <b>OR</b> (6 credits) ENGL 115 (University Writing and Research) <i>and</i> , ENGL 225
Writing Requirement	6 units		ATSU 150 or ENGL 100 + LPI or ENGL 112		Three credits from: ENGL 105 ENGL 210 or CMNS 155		<b>ECON 225 as pre or co-requisite for 300 levels</b>	
Reasoning					PHIL 100 or <b>ECON</b>			

Table A7.1 Faculty of Arts Requirements								
Degree Requirements	SFU	TRU	UBC	UBC-O	UFV	UNBC	UVIC	VIU
Requirement					100 + one additional)			(Business and Technical Writing) for programs that require ENGL 225. <b>OR</b> (12 credits) LBST 111 (Ways of Knowing I) and, LBST 112 (Ways of Knowing II).
Humanities			18 credits from 2 or more disciplines including one language		6 credits			
Social Sciences			18 credits from 2 or more disciplines (includes ECON)		6 credits (Includes ECON)	One course (includes ECON); see calendar listing		
Lab Science					Four Credits			
Natural Sciences			6 credits (includes MATH)			One course (see calendar listing)		



## Appendix 8: An Assessment of Issues and Alternatives

During the course of the analysis project, a number of issues and alternatives were reviewed and presented to the Economics Articulation Committee. This appendix is a review of those issues and alternatives as initially presented. Post-presentation comments are *italicized*.

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

1. The 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 institution-specific post-principles courses at UNBC might be a problem.

*The location of the Intermediate Theory courses has been an issue of discussion for many years and is not likely to be resolved with this report. However, it is not a major impediment to the FPM.*

*The ECON 225 (UVIC) course and the post-principles (UNBC) courses were discussed. Both institutions indicate that these courses can be taken following admission.*

*As part of the analysis process, a number of alternatives to FPMs were considered. Alternatives were presented to the Articulation Committee at the 2009 annual meetings.*

*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 alternative five is “do nothing at this time.”*

### Alternative 1: an Associate Degree

The Associate of Arts degree is defined as requiring:<sup>13</sup>

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.

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<sup>13</sup> Associate degree requirements can be found at: <http://bctransferguide.ca/associate/requirements.cfm>.



Table 8.1 illustrates the Associate Degree alternative for Economics by comparing it to the minimum standard at each institution for 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 straightforward and has been accomplished elsewhere. Following KPU's approach, the Principles courses can be taken from the Social Science requirements, and the Post-Principles courses from the Other Arts.<sup>14</sup> Other accommodations can be made, such as an additional mathematics/statistics course from the Other category, but the result is a program requiring more than the 60 credit hours total that defines the degree.

Additional notes:

1. SFU's Principles courses total eight credit hours. However, transferred principles courses 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).

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<sup>14</sup> See < <http://www.kwantlen.ca/calendar/programs/aad-econ.html>>.

<b>Table A8.1</b>			
<b>Comparison of Lower Level Requirements and Associate of Arts Requirements</b>			
Institutions	Minimum Standard	Associate of Arts	Differences to address
<b>Major (Arts)</b>			
1. Economic Principles	6		6
2. Economics Post Principles	6		6
3. Economics Intermediate Theory	6		6
4. Mathematics	6	<b>3</b>	3
5. Statistics	6	<b>3</b>	3
6. English Literature	6	<b>6</b>	6
7. Writing Intensive	6		
8. Humanities other than English	6	<b>6</b>	
9. Lab Sciences	6	<b>3</b>	3
10. Other Arts	3	<b>12</b>	?
11. Other	12	<b>9</b>	3
<b>Total Credits:</b>	71		

**Alternative 2: Multi-flexibility**

While an FPM is designed to assist students to take 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 8.2 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 major degree would take the Low Quant program. Students determined to do a quant-intense degree could do so without penalty.

<b>Table A8.2</b>			
<b>High and Low Quantitative FPM</b>			
Institutions	Minimum Standards	High Quant	Low Quant
<b>Economics Major (Arts Degree)</b>			
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 designing lower level requirements without regard to existing programs. The consequence is that upper levels would also have to be designed later.

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 as yet unidentified**

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 involve only three courses. This is approximately a one-term penalty.

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