This analysis was based on the pre-determined criteria and measures listed below:

Section	Description	Measures
Student Demand	Includes an assessment of OCAS (2007 - 2011) enrolment data at other colleges in terms of mean growth rate with a specific focus on Fleming's direct competitors where appropriate (Georgian, Sheridan, Seneca and Durham)  Trends in certificate, diploma, degree, apprenticeship and continuing education (where available).	<ul> <li>Strong = Fleming enrolment growth is outpacing system and is equal to or greater than 3%</li> <li>Moderate = Fleming enrolment growth is equivalent to system demand and is between 1.0 to 2.9%</li> <li>Weak = Fleming enrolment growth is less than the system demand and is less than 1%</li> </ul>
	Click Below to Access Full Source Document: Fall Enrollment Trend	
Labour Market	Includes projected employment rate growth based on a consolidation of various Ontario, Canadian, and US sources including HRSDC, Sector Council Reports US Bureau of Labour Statistics, and the MTCU Employment Profile.	<ul> <li>Strong = Between 5-6 positive labour market indicators</li> <li>Moderate = Between 3-5 positive labour market indicators</li> <li>Weak = Between 1-2 or no positive labour market indicators</li> </ul>
Competitive Analysis	Includes the number of actual colleges offering the program as well as the ratio of applications to acceptances at Fleming compared to other colleges and specific comment about Fleming's direct competitors where appropriate (Georgian, Sheridan, Seneca and Durham)	<ul> <li>Strong = Fleming conversion ratio is greater than 2 below the system</li> <li>Moderate = Fleming conversion ratio is 1 above, below or equal to the system</li> <li>Weak = Fleming conversion ratio is greater than 2 above than the system</li> </ul>
	Click Below to Access Full Source Document: Fall Conversion Report	
Financial Analysis	Includes a review of Contribution to Overhead (CTO) for existing programs (2010-11)  Click Below to Access Full Source Document: Costing Analysis	<ul> <li>Strong = CTO is greater than 35%</li> <li>Moderate = CTO is between 30 - 34%</li> <li>Weak = CTO is between 20 - 30%</li> <li>No Contribution = 19% or less</li> </ul>

Key Performance Indicators	Includes KPI trends from the Key Performance Indicator Summary 5 Year Historical Overview KPI Data from Reporting Years 2008-2012.  Click Below to Access Full Source Document:	<ul> <li>Strong = Above system average in 6-7 indicators</li> <li>Moderate = Above system average in 3-5 indicators</li> <li>Weak = Above system average in 0-2 indicators.</li> </ul>
Resource Analysis	Requires school level assessment regarding space, technology, capital equipment and human resources. Recommendations from recent Program Review Reports included here	

### **Preparatory Health Sciences (41601)**

#### Student Demand<sup>1</sup> **MODERATE**

The following information consists of OCAS yearly student fall registration data as well as a mean growth rate and average student registration for each program under these categories:

#### Certificate

- Twenty colleges offer this program, including two of Fleming's main competitors
- Fleming has a 8% mean growth rate, slightly lower than the system rate of 9%
- Out of the key competitors, Georgian has the highest mean growth rate (14%) and Seneca has the lowest (1%)
- Overall, La Cite has the highest mean growth rate (26%) and Centennial has the lowest mean growth rate (-10%)
- St. Clair has the highest average registration with 532 students and Centennial has the lowest with 17 students

<sup>&</sup>lt;sup>1</sup> Registration data obtained from the Program Counts by Applicant Type Report (RPT0050P) in the OCAS Reporting and Analytics Cube December 7, 2011. Some programs/colleges may not be included because they were missing MCU codes in the OCAS dataset Prepared by Fleming Data Research (07-2012)

### Certificate

Program: 4160	1 - PR	EPAR	RATORY H	IEALTH	SCIE	ENCES								
	2007	2008	% Change (07-08)	2008	2009	% Change (08-09)	2009		% Change (09-10)	2010	2011	% Change (10-11)	% Mean Growth Rate (07-11)	5 Year Average Reg. Students
CAMBRIAN	183	172	-6	172	190	10	190	202	6	202	220	9	5	193
CANADORE	36	40	11	40	74	85	74	80	8	80	58	-28	19	58
CENTENNIAL	4				22		22	28	27	28	15	-46	-10	17
COLLÈGE BORÉAL	52	40	-23	40	64	60	64	39	-39	39	44	13	3	48
CONESTOGA		87		87	109	25	109	117	7	117	163	39	24	119
CONFEDERATION	161	231	43	231	313	35	313	294	-6	294	284	-3	17	257
FANSHAWE	335	339	1	339	331	-2	331	405	22	405	422	4	6	366
FLEMING	43	53	23	53	49	-8	49	67	37	67	53	-21	8	53
GEORGE BROWN	231	233	1	233	259	11	259	251	-3	251	319	27	9	259
GEORGIAN	295	329	12	329	404	23	404	459	14	459	505	10	14	398
LA CITÉ COLLÉGIAL								68		68	86	26	26	77
LAMBTON	151	144	-5	144	152	6	152	161	6	161	160	-1	2	154
LOYALIST	71				83		83	67	-19	67	88	31	6	77
MOHAWK					194		194	200	3	200	175	-13	-5	190
NIAGARA	60	73	22	73	77	5	77	78	1	78	80	3	8	74
NORTHERN	22	41	86	41	31	-24	31	50	61	50	29	-42	20	35
SAULT	88	77	-13	77	88	14	88	76	-14	76	82	8	-1	82
SENECA	123	144	17	144	123	-15	123	128	4	128	125	-2	1	129
ST. CLAIR	483	578	20	578	586	1	586	581	-1	581	432	-26	-1	532
ST. LAWRENCE	97	105	8	105	120	14	120	108	-10	108	111	3	4	108
Total	2435	2686	10	2686	3269	22	3269	3459	6	3459	3451	0	9	3060

Program: 4139	Program: 41397 - ORIENTATION TO NURSING IN ONTARIO FOR PRACTICAL NURSES												
	2007	2008	% Change (07-08)	2008	2009	% Change (08-09)	2009	2010	% Change (09-10)	2010	% Change 2011 (10-11)	% Mean Growth Rate (07-11)	5 Year Average Reg. Students
ALGONQUIN	2	6	200	6	5	-17	5	7	40	7		74	5
Total	2	6	200	6	5	-17	5	7	40	7		74	5

#### **Labour Market**

#### MODERATE

"Fleming's Preparatory Health Science certificate program includes the essential courses to develop the competencies needed for successful application to the Trent/Fleming Bachelor of Science - Nursing program. Therefore most of the labour market is in regard to the nursing field of study."

"Nursing is a great career for men and women with a caring nature. Nurses restore, maintain and advance the health of individuals, groups and entire communities. They provide direct nursing care, which may include working with physicians to perform examinations, delivering treatment as prescribed by a physician, and in some cases administer medications. Nurses often monitor and assess a patient's condition and play a key role in a patient's rehabilitation. Nurses also plan and deliver health programs for groups or communities."

#### **Types of Nurses**

"In Ontario, there are registered practical nurses (RPNs), registered nurses (RNs) and nurse practitioners (NPs). These categories reflect different levels of education and responsibility. Nurse practitioners have advanced training and may in some instances diagnose, order tests and prescribe certain medications."

#### Work

"Nurses can practise in a wide range of settings, which provides them with lots of flexibility in terms of work environment. Settings include: hospitals, physicians' offices, clinics, long-term care facilities, schools, homes, poison control centres, rehabilitation centres, military bases, factories and the government."

#### **Job Prospects**

"Job prospects for nurses are excellent. Ontario is facing a nursing shortage because baby boomers (born between 1946 and 1964) are starting to retire, the population is aging, more services are being delivered to patients at home, in the community and there is increased emphasis on illness prevention. Nurses can find available positions by searching HFOJobs."

#### **New Roles for Nurses<sup>2</sup>**

#### Nurse Performed Flexible Sigmidoscopy

A registered nurse with extended specialized education in anatomy, physiology and pathophysiology who works with a physician to perform flexible sigmoidoscopies (i.e., diagnostic procedure used to screen for abnormalities in the lower third of the colon). These individuals can support Ontario's colon cancer screening initiative.

#### Surgical First Assist

A Surgical First Assist works with the surgeon and the rest of the operating room team to ensure the safe outcome for a surgical patient before, during and after surgery. A registered nurse can perform this role with an additional certification in surgical first assistance.

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<sup>&</sup>lt;sup>2</sup> "Working as a Nurse." *Health Force Ontario*. N.p., n.d. Web. 4 July 2012. <a href="http://www.healthforceontario.ca/Studying/career\_profile/nurse.aspx">http://www.healthforceontario.ca/Studying/career\_profile/nurse.aspx</a>>.

• "The Nursing Graduate Guarantee is an initiative of the Ontario Ministry of Health and Long-Term Care aimed at ensuring that every new nursing graduate (RN and RPN) who wishes to work full time in Ontario will have that opportunity."

"Our healthcare system relies on a range of health professionals, each with unique expertise, to meet the health needs of Ontarians. However, in the past, we did not have a good grasp on the profile of these professions. For example, we knew very little about how many people were practising in these professions, where they were working, and whether Ontario had the right combination of these professionals to meet future needs. The Health Professions Database is a significant step towards having a truly representative snapshot of Ontario's regulated healthcare workforce."

"Healthcare employment continued to increase in May (+33,000). Within the industry, employment in ambulatory health care services, which includes offices of physicians and outpatient care centers, rose by 23,000 over the month. Over the year, health care employment has risen by 340,000."<sup>4</sup>

#### **Employment Ontario**<sup>5</sup>

Practical Nurses (NOC - 3233)

- Employment Ontario Rating (2009-2013):
  - Average
- Education and Training
  - "RPNs require a diploma in practical nursing from an Ontario College of Applied Arts and Technology, or equivalent, and must pass a national exam. These requirements may not apply to applicants who are currently fully licensed and practicing in another province or territory of Canada. Registration with the College of Nurses of Ontario (CNO) is mandatory to practice as an RPN in Ontario. The CNO may determine that some internationally educated nurses need to complete additional study for registration; bridging programs are in place at some educational institutions."
  - "Operating room technicians are not regulated by the government of Ontario and registration with a health regulatory college is not required."
  - "The Ontario government supports programs that can help newcomers get their license or certificate in their profession or trade so that they can work in Ontario."

#### Demand

"Changes in employment patterns may occur as the health care system shifts from institutional to home care for people with chronic illnesses and disabling conditions in response to an increasing elderly population. A substantial number of job openings though will arise each year from the need to replace workers who retire."

<sup>&</sup>lt;sup>3</sup> "Health Professions Database." *Health Force Ontario*. N.p., n.d. Web. 4 July 2012. <a href="http://www.healthforceontario.ca/WhatIsHFO/evidence\_hhr/hpdb.aspx">http://www.healthforceontario.ca/WhatIsHFO/evidence\_hhr/hpdb.aspx</a>.

<sup>&</sup>lt;sup>4</sup> "Employment Situation News Release." *Bureau of Labour Statistics*. N.p., n.d. Web. 4 July 2012. <a href="http://www.bls.gov/news.release/empsit.htm">http://www.bls.gov/news.release/empsit.htm</a>>.

<sup>&</sup>lt;sup>5</sup> "3233 Licensed Practical Nurses." *Employment Ontario*. N.p., n.d. Web. 26 June 2012. <a href="http://www.tcu.gov.on.ca/eng/labourmarket/ojf/pdf/3233\_e.pdf">http://www.tcu.gov.on.ca/eng/labourmarket/ojf/pdf/3233\_e.pdf</a>>.

 "The role of registered practical nurses is changing as more technology is introduced at the bedside. The growing complexity of nursing care and limiting of hospitalization to critically ill patients will place additional educational demands on the workers employed in acute care."

#### HRSDC<sup>6</sup>

Practical Nurses (NOC - 3233)

Job Openings (2011/2020): 162,000
Job Seekers(2011/2020): 128,671

• Post Secondary Education Graduates: 73,509

- "The majority of job seekers will come from the school system (57%) and 9% from immigration. Another 21% will change careers into this field (net mobility)."
- "As the Canadian population ages, the demand for health services will increase substantially, thus resulting in increased demand for health professionals in general. On the other hand, the number of job seekers is also expected to increase appreciably. They will come from the school system and from immigration, but will be insufficient to fill the job openings."
- "An analysis of recent nursing school leavers showed that, although most university graduates in the field go on to become registered nurses, a much smaller proportion of college graduates in nursing go on to become registered nurses, whereas, in the 1990s most nursing graduates had only a college diploma. In fact, compared to a few years ago, only half of all college graduates in nursing will actually work as nurses in the coming years. A significant proportion of those graduates will enter occupations outside the health sector. There may be several explanations for this situation, such as the fact that it is now common for a university degree to be required for jobs in this field and the difficult working conditions (night shifts, overtime, etc.), which discourage some school leavers from entering or remaining in the occupation."

#### US Bureau of Labour<sup>7</sup>

- Employment Growth (2010/2020):Increase 22%
  - o 752,300 (2010) to 920,800 (2020)
- "As the U.S. population ages, the overall need for healthcare is expected to increase. This trend will lead to increased employment of LPNs and LVNs in hospitals, physicians' offices, and other healthcare settings. LPNs and LVNs also will be needed in residential care facilities such as nursing homes and assisted-living centers. Many procedures that once could be done only in hospitals are now being done outside of hospitals, creating demand in other settings, such as outpatient care centers."

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<sup>&</sup>lt;sup>6</sup>"Nurse Supervisors And Registered Nurses (315)." *Human Resources and Skills Development Canada*. N.p., n.d. Web. 20 June 2012. <a href="http://www23.hrsdc.gc.ca/.4cc.5p.1t.3onsummaryd.2tail@-eng.jsp?tid=50">http://www23.hrsdc.gc.ca/.4cc.5p.1t.3onsummaryd.2tail@-eng.jsp?tid=50</a>>.

<sup>&</sup>lt;sup>7</sup>Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, 2012-13 Edition, Licensed Practical and Licensed Vocational Nurses, Web. http://www.bls.gov/ooh/healthcare/licensed-practical-and-licensed-vocational-nurses.htm, *June 26*, 2012.

#### Sector Council Report<sup>8</sup>

- "From 2006 to 2010 (the last five years for which data is available), the number of RNs employed in nursing in Ontario remained below the national average. In 2010, Ontario employed only 721 RNs per 100,000 people, compared to 787 RNs per 100,000 people in all of Canada. The number of RNs employed in Ontario is therefore almost 10 per cent lower than the national average."
- "Losses in the numbers of RPNs and RNs are attributable to a variety of factors, including emigration, retirement, and leaving the nursing profession. Some of the losses in the numbers of RPNs are due to RPNs leaving the RPN role to bridge to the RN role. Between 2010 and 2011 Ontario gained 3,001 RPNs, but lost 1,751 RPNs. Over the same period, the province gained 4,136 RNs, but lost 4,181 RNs, which amounts to a net loss for the first time in five years. Although efforts made over the past five or six years to recruit and retain RNs and RPNs have been largely successful, more needs to be done to ensure an adequate number of nurses in Ontario."
- "In the past five years, the rate of full-time employment of regulated nurses in Ontario has increased steadily, due in large part to a number of strategies aimed at meeting the Ministry of Health and Long-Term Care's commitment to achieving a 70 percent rate of full-time employment for nurses in Ontario. Seventy percent rate is considered the optimal rate of full-time employment for Ontario's nursing workforce. In 2007, only 61.3 percent of regulated nurses in Ontario reported working full-time, compared to 66.4 percent in 2011. In 2011, the rate of full-time employment for RPNs increased from 58.0 percent to 61.0 percent. In the same period, 67.9 percent of RNs reported their employment status as full-time, an increase of 2.4 percent from the previous year."
- "In 2011, a large percentage of RPNs (39.0 percent) employed in nursing in Ontario reported long-term care as their sector of employment, compared to 9.2 percent of RNs. In the same year, the majority of RNs (60 percent) employed in nursing in Ontario reported hospital as their sector employment, compared to 39.3 percent of RPNs. A large percentage of RNs (18.0 percent) reported working in the community sector, as did a smaller percentage of RPNs (13.9 percent)."

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<sup>&</sup>lt;sup>8</sup> "Nursing Policy." *Registered Practical Nurses Association of Ontario*. N.p., 3 Apr. 2012. Web. 20 June 2012. <a href="http://www.rpnao.org/issues/nursing-policy">http://www.rpnao.org/issues/nursing-policy</a>.

### **Employment Profile**<sup>9</sup>

• In 2010-2011, **48.6%** of graduates were employed in a full time position which related to this program of study provincially

<sup>&</sup>lt;sup>9</sup> "Employment Profile." *Ontario*. N.p., 2011. Web. 19 July 2012.

<sup>&</sup>lt; http://www.tcu.gov.on.ca/pepg/audiences/colleges/serials/eprofile 09-10/profile 10.pdf>.

**Nursing Related** 

5,224 Total Graduates in Survey: 3,643 Response Rate: ● Total Graduates:

#### **Programs in Nursing Related**

		Total	Total in	Total in Labour	
Programs	Duration	Grads	Survey	Force	Colleges
Bridging To University Nursing	Post Diploma	192	133	58	Centennial, George Brown
Clinically Intensive Orientation To Nursing In Ontario	Post Diploma	4	3	3	Algonquin
Orientation To Nursing In Ontario For Practical Nurses	l Year	5	4	3	Algonquin
Personal Support Worker	l Year	2,088	1,478	1,279	Algonquin, Boréal, Cambrian, Canadore, Centennial, Conestoga, Confederation, Durham, Fanshawe, George Brown, Georgian, Humber, La Cité, Lambton, Loyalist, Mohawk, Niagara, Northern, Sault, Sheridan, Sir Sandford Fleming, St. Clair, St. Lawrence
Practical Nursing	2 Years	2,566	1,786	1,599	All 24 colleges
Registered Nurse – Critical Care Nursing	Post Diploma	194	116	114	Durham, George Brown, St. Lawrence
Registered Nurse – Emergency Nursing	Post Diploma	2	-	-	Georgian
Registered Nurse – Occupational Health Nursing	Post Diploma	27	22	21	St. Lawrence
Registered Nurse – Oncology Nursing	Post Diploma	6	4	4	Georgian
Registered Nurse – Operating Room	Post Diploma	49	36	35	Centennial, Fanshawe, Georgian, George Brown
Registered Nurse – Perinatal Nursing	Post Diploma	50	38	35	George Brown
Registered Practical Nurse – Administration Of Medications	Post Diploma	35	20	20	Sault
Registered Practical Nurse — Operating Room	Post Diploma	3	3	3	Fanshawe
Registered Practical Nurse — Psychiatric Nursing	Post Diploma	3	-	-	St. Lawrence

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<sup>594</sup> graduates were reported after the survey window had closed. While program information for these graduates has been included wherever possible, these graduates are not included in survey results, such as response rates.

### **Nursing Related**

#### Summary of Survey Data

	Program Cluster	All Programs
Survey Population	3,643	50,622
Labour Force Participation	87%	74%
Employment Rate <sup>a</sup>	98%	83%
Employed Part-time <sup>a</sup>	28%	18%
Employed Full-time <sup>a</sup>	59%	65%
Average Annual Earnings – Total	\$39,716	\$33,199
Average Annual Earnings – Female	\$39,604	\$31,897
Average Annual Earnings – Male	\$40,618	\$34,607
Graduate Satisfaction	90%	79%
Employer Satisfaction	94%	93%

a. As a percentage of graduates in the labour force.

#### Graduate Outcomes for Program Cluster (as a percentage of all respondents)



#### Top Five Industries of Employment

	#	%
Nursing and Residential Care Facilities	1,075	40.9%
Hospitals	686	26.1%
Ambulatory Health Care Services	326	12.4%
Social Assistance	188	7.2%
Food Services and Drinking Places	59	2.2%

### **Top Five Occupational Categories**

	#	%
Licensed Practical Nurses	963	36.4%
Visiting Homemakers, Housekeepers and Related Occupations	718	27.1%
Registered Nurses	337	12.7%
Nurse Aldes, Orderlies and Patient Service Associates	209	7.9%
Retail Salespersons and Sales Clerks	46	1.7%

196 Employment Profile: 2009-2010 Graduates

**Nursing Related** 

### Summary of Graduate Outcomes by Program

	Full-time Employed,		Full-time Employed,		Part-time Employed,		Part-time Employed,				No	t in
	Program #	m Related %	Program #	Unrelated %	Program #	m Related %	Program #	Unrelated %	Unen	iployed %	Labou #	r Force %
Bridging To University Nursing	20	15.0	20	15.0	10	7.5	7	5.3	- 1	0.8	75	56.4
Personal Support Worker	494	33.4	172	11.6	396	26.8	82	5.5	135	9.1	199	13.5
Practical Nursing	868	48.6	99	5.5	302	16.9	78	4.4	252	14.1	187	10.5
Registered Nurse – Critical Care Nursing	98	84.5	5	4.3	9	7.8	-	-	2	1.7	2	1.7
Registered Nurse – Occupational Health Nursi	IS ng	68.2	3	13.6	2	9.1	1	4.5	-	-	- 1	4.5
Registered Nurse – Operating Room	20	55.6	8	22.2	5	13.9	-	-	2	5.6	- 1	2.8
Registered Nurse – Perinatal Nursing	33	86.8	- 1	2.6	-	-	-	-	- 1	2.6	3	7.9
Registered Practical Nurse – Administration Of Medications	17	85.0	1	5.0	1	5.0	1	5.0	-	-	-	-
All Programs in Cluster	1,565	43.I	309	8.5	725	20.0	169	4.7	393	10.8	468	12.9

<sup>\*</sup> Does not include 6 programs with fewer than 5 graduates in the labour force.

#### Earnings of Full-time Employed Participants

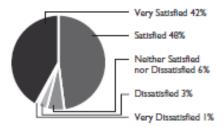
Program	Average – Females	Average – Males	Median – Females	Median – Males	Average for Program	Median for Program
Bridging To University Nursing	\$41,826	\$45,728	\$43,018	\$50,057	\$42,654	\$43,800
Personal Support Worker	\$28,965	\$31,533	\$27,782	\$31,286	\$29,298	\$28,157
Practical Nursing	\$42,416	\$44,027	\$42,868	\$45,886	\$42,595	\$43,396
Registered Nurse – Critical Care Nursing	\$63,394	\$59,290	\$60,486	\$59,742	\$63,007	\$60,486
Registered Nurse – Occupational Health Nursing	\$60,540	-	\$65,000	-	\$63,828	\$65,872
Registered Nurse - Operating Room	\$53,423	-	\$57,292	-	\$55,062	\$58,270
Registered Nurse - Perinatal Nursing	\$58,480	-	\$59,443	-	\$58,477	\$59,052
Registered Practical Nurse – Administration Of Medications	\$43,418	-	\$47,415	-	\$43,418	\$47,415
All Programs in Cluster*	\$39,513	\$40,618	\$38,382	\$39,814	\$39,642	\$38,569

<sup>\*</sup> Does not include 6 programs with fewer than 5 graduates in the labour force.

### **Nursing Related**

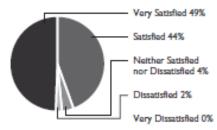
#### Program Cluster Satisfaction

Graduate Satisfaction with the usefulness of his/her college education in achieving his/her goals after graduation:\*



<sup>\* 3,348</sup> graduates participated in this question.

Employer Satisfaction with employee overall college preparation for the type of work he/she was doing.\*



<sup>\* 793</sup> employers participated in this survey.

#### **Program Cluster Historical Data**

	00-01 Grads	01-02 Grads	02-03 Grads	03-04 Grads	04-05 Grads	05-06 Grads	06-07 Grads	07-08 Grads	08-09 Grads	09-10 Grads
Percentage Employed	95.2%	94.4%	94.0%	92.2%	90.8%	93.2%	94.7%	94.5%	91.1%	87.6%
Percentage Employed Full-time	66.1%	66.2%	65.6%	63.5%	58.1%	60.9%	67.6%	72.6%	66.1%	59.3%
Percentage Employed Full-time Related Jobs	60.6%	60.5%	59.6%	57.9%	50.2%	52.2%	58.8%	64.7%	58.1%	49.5%
Average Annual Salary Full-time Related Jobs	\$33,487	\$36,623	\$37,104	\$39,784	\$35,416	\$36,083	\$39,059	\$42,365	\$42,269	\$41,286

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Employment Profile: 2009-2010 Graduates

### Working in Canada<sup>10</sup>

Practical Nurses (NOC - 3233)

o Ontario Rating: Good

Wage Range by Region:

Location	Wage (\$/	hr)	
	Low	Median	High
Ontario	18.00	24.99	30.53
HamiltonNiagara Peninsula Region	18.00	24.07	31.25
Kingston - Pembroke Region	18.00	24.99	30.53
KitchenerWaterlooBarrie Region	18.00	24.71	35.00
London Region	18.00	24.99	30.53
Muskoka-Kawarthas Region	18.00	24.99	30.53
Northeast Region	17.00	25.00	30.00
Northwest Region	18.00	24.99	30.53
Ottawa Region	17.49	25.00	31.11
StratfordBruce Peninsula Region	18.00	24.99	30.53
Toronto Region	18.33	25.00	30.00
Windsor-Sarnia Region	18.00	24.99	30.53

### Competitive Analysis<sup>11</sup> • MODERATE

The following information consists of OCAS yearly fall application and registration data as well as a conversion ratio for each program under this category:

#### Certificate

- Some courses that other colleges offer with this program include:
  - Anatomy and Physiology
  - Success Strategies for Health Care Careers
  - Health Care Informatics
  - Introduction to Physical Anthropology
  - Sociology
  - Concepts in Physics
  - Critical Thinking /Problem Solving
  - Medical Terminology

<sup>&</sup>lt;sup>10</sup>"Licensed Practical Nurses (NOC 3233)." Working in Canada. N.p., n.d. Web. 20 June 2012.

<sup>&</sup>lt;a href="http://www.workingincanada.gc.ca/report-">http://www.workingincanada.gc.ca/report-</a>

eng.do? area = 8792& lang = eng&noc = 3233& action = final&ln = p@ionKeyword = Peterborough%2C + Ontario&s = 2& source = 3& titleKeyword = registered + practical + nurse + %28R.P.N.%29#out>.

<sup>&</sup>lt;sup>11</sup> Application data obtained from OCAS College Count Cube October 19, 2011 Registration data obtained from the Program Counts by Applicant Type Report (RPT0050P) in the OCAS Reporting and Analytics Cube December 7, 2011. Some programs/colleges may not be included because they were missing MCU codes in the OCAS dataset Prepared by Fleming Data Research (07-2012)

- Fleming is even with the system conversion ratio of **4:1** for 2011
- Georgian has the best conversion ratio of 2:1 for 2011, and Mohawk had the worst (6:1) in 2011
- Fanshawe has consistently had the highest number of applications each year (might warrant a closer look at their promotion strategy)

#### Certificate

	Program: 4160	1 - PR	EPA	RATORY H	IEALT	H SC	IENCES									
		App. 2007	Reg. 2007	Conversion Ratio	App. 2008	Reg. 2008	Conversion Ratio	App. 2009	Reg. 2009	Conversion Ratio	App. 2010	Reg. 2010	Conversion Ratio	App. 2011	Reg. ( 2011	Conversion Ratio
(	CAMBRIAN	562	183	3:1	522	172	3:1	607	190	3:1	619	202	3:1	628	220	3:1
(	CANADORE	143	36	4:1	143	40	4:1	198	74	3:1	225	80	3:1	213	58	4:1
(	CENTENNIAL	45	4	11:1	139			151	22	7:1	197	28	7:1	39	15	3:1
(	COLLÈGE BORÉAL	153	52	3:1	126	40	3:1	170	64	3:1	160	39	4:1	136	44	3:1
(	CONESTOGA	0			497	87	6:1	594	109	5:1	656	117	6:1	730	163	4:1
(	CONFEDERATION	434	161	3:1	506	231	2:1	695	313	2:1	759	294	3:1	729	284	3:1
F	ANSHAWE	1390	335	4:1	1443	339	4:1	1472	331	4:1	1656	405	4:1	1890	422	4:1
►F	LEMING	211	43	5:1	212	53	4:1	198	49	4:1	232	67	3:1	229	53	4:1
0	GEORGE BROWN	812	231	4:1	1054	233	5:1	1223	259	5:1	1122	251	4:1	1378	319	4:1
0	GEORGIAN	752	295	3:1	769	329	2:1	933	404	2:1	1149	459	3:1	1220	505	2:1
L	A CITÉ COLLÉGIAL	64			0			0			161	68	2:1	228	86	3:1
L	AMBTON	505	151	3:1	484	144	3:1	555	152	4:1	576	161	4:1	534	160	3:1
L	OYALIST.	259	71	4:1	262			271	83	3:1	274	67	4:1	253	88	3:1
N	MOHAWK	0			0			851	194	4:1	958	200	5:1	1073	175	6:1
١	NIAGARA	268	60	4:1	272	73	4:1	267	77	3:1	281	78	4:1	298	80	4:1
1	NORTHERN	92	22	4:1	121	41	3:1	107	31	3:1	161	50	3:1	108	29	4:1
8	SAULT	194	88	2:1	190	77	2:1	188	88	2:1	194	76	3:1	190	82	2:1
8	SENECA	581	123	5:1	578	144	4:1	603	123	5:1	605	128	5:1	684	125	5:1
5	ST. CLAIR	1260	483	3:1	1346	578	2:1	1330	586	2:1	1311	581	2:1	1163	432	3:1
5	ST. LAWRENCE	364	97	4:1	396	105	4:1	408	120	3:1	437	108	4:1	507	111	5:1
1	Total	8089	2435	3:1	9060	2686	3:1	10821	3269	3:1	11733	3459	3:1	1 2230	3451	4:1

Program: 41397 - ORIENTATION TO NURSING IN ONTARIO FOR PRACTICAL NURSES														
		Reg. 2007		App. 2008		Conversion Ratio	App. 2009			App. 2010		Conversion Ratio	App. 2011	Reg. Conversion 2011 Ratio
ALGONQUIN	11	2	6:1	12	6	2:1	17	5	3:1	14	7	2:1	12	
Total	11	2	6:1	12	6	2:1	17	5	3:1	14	7	2:1	12	

### Financial Analysis • STRONG

Source: Program Costing Analysis 2010/2011

Contribution to Overhead: 48.0%

Program Weight: 1.00Funding Unit: 1.10

### **Key Performance Indicators** • **WEAK**

Source: Key Performance Indicator Summary 5 Year Historical Overview KPI Data from Reporting Years 2007-2011

KPI1-Graduation Rate -

KPI2-Working
 KPI3-Working Related
 KPI4-Grad. Satisfaction
 KPI8-Student Satisfaction-Learning
 KPI9-Student Satisfaction-Teachers
 KPI11-Grad. Satisfaction-Program

### **Resource Analysis**

#### **Equipment**

#### **Staffing**

The following information was extracted from the 2011-2012 program review:

Kari Draker-Fortis – consistent math person involved in PHS program team

#### **Space**

The following information was extracted from the 2011-2012 program review:

 Kari Draker-Fortis - from section 8.2 – space and timetabling limitations from only one lab space (BR635) with 30 student capacity

### **Appendix**

The following is the original environmental scan conducted by the Library Researchers to form the basis of the previous summary of Key Research **Findings Report.** 

**Preparatory Health Sciences** Program Research 2012

### Overview of the Program

Fleming's Preparatory Health Science certificate program includes the essential courses to develop the competencies needed for successful application to the Trent/Fleming Bachelor of Science - Nursing program.

### **Labour Market**

http://www.healthforceontario.ca/ Making Ontario the employer of choice in healthcare

#### Working as a Nurse

Learn more about what a nurse does, employment prospects in Ontario and the rewards of choosing a nursing career.

#### **Nurse Job Description**

Nursing is a great career for men and women with a caring nature. Nurses restore, maintain and advance the health of individuals, groups and entire communities. They provide direct nursing care, which may include working with physicians to perform examinations, delivering treatment as prescribed by a physician, and in some cases administer medications. Nurses often monitor and assess a patient's condition and play a key role in a patient's rehabilitation. Nurses also plan and deliver health programs for groups or communities.

#### **Types of Nurses**

In Ontario, there are registered practical nurses (RPNs), registered nurses (RNs) and nurse practitioners (NPs). These categories reflect different levels of education and responsibility. Nurse practitioners have advanced training and may in some instances diagnose, order tests and prescribe certain medications.

#### Work

Nurses can practise in a wide range of settings, which provides them with lots of flexibility in terms of work environment. Settings include: hospitals, physicians' offices, clinics, long-term care facilities, schools, homes, poison control centres, rehabilitation centres, military bases, factories and the government.

Learn more about becoming a RPN, RN or NP.

#### The Nursing Graduate Guarantee

The Nursing Graduate Guarantee is an initiative of the Ontario Ministry of Health and Long-Term Care aimed at ensuring that

#### **Job Prospects**

Job prospects for nurses are excellent. Ontario is facing a nursing shortage because baby boomers (born between 1946 and 1964) are starting to retire, the

every new nursing graduate (RN and RPN) who wishes to work full time in Ontario will have that opportunity.

population is aging, more services are being delivered to patients at home, in the community and there is increased emphasis on illness prevention. Nurses can find available positions by searching <a href="https://example.com/html/>
HFOJobs">HFOJobs</a>.

#### **New Roles for Nurses**

#### **Nurse Performed Flexible Sigmidoscopy**

A registered nurse with extended specialized education in anatomy, physiology and pathophysiology who works with a physician to perform flexible sigmoidoscopies (i.e., diagnostic procedure used to screen for abnormalities in the lower third of the colon). These individuals can support Ontario's colon cancer screening initiative.

#### **Surgical First Assist**

A Surgical First Assist works with the surgeon and the rest of the operating room team to ensure the safe outcome for a surgical patient before, during and after surgery. A registered nurse can perform this role with an additional certification in surgical first assistance.

Registered Nurse: Surgical First Assist (RN-SFA) Pilot Project Update

#### **Health Professions Database**

**Health Professions Database** 

Health Professionals, each with unique expertise, to meet the health needs of Ontarians. However, in the past, we did not have a good grasp on the profile of these professions. For example, we knew very little about how many people were practising in these professions, where they were working, and whether Ontario had the right combination of these professionals to meet future needs. The Health Professions Database is a significant step towards having a truly representative snapshot of Ontario's regulated healthcare workforce.

#### US Bureau of Labour Statistics 2012

Healthcare employment continued to increase in May (+33,000). Within the industry, employment in ambulatory health care services, which includes offices of physicians and outpatient care centers, rose by 23,000 over the month. Over the year, health care employment has risen by 340,000.

### **Educational Competitors**

#### **Algonquin College Pre-Nursing Program**

Ontario College Certificate

1 Year(s) Program Code: 1438N01FWO Academic Year: 2011/2012

The Pre-nursing program at Algonquin College is designed for students who are interested in applying to the collaborative Bachelor of Science in Nursing four-year degree program. Students develop time-management and study skills, and determine if they have the interest, aptitude and skills required to pursue a career in nursing.

Two-Year Diploma Program

The two-year Ontario College Diploma program begins in September (for graduates of the oneyear certificate program) and in January. Year II provides a well-balanced selection of courses in the social sciences and humanities. On successful completion of Year II, students receive an Ontario College Diploma.

Graduates of the diploma program may be eligible to transfer some credits towards a university degree.

#### Conestoga College Pre-Health Sciences

**Pre-Health Sciences** Ontario College Certificate

College: CONS Program: 1214 Campus: DO Academic Year: 2011 / 2012

#### About the Program

This one-year Pre-Health Sciences Certificate Program offers two semesters of full-time study. The program curriculum is for students who wish to concentrate on the Health Sciences field. It is designed to prepare students for application to Conestoga College's School of Health Sciences Advanced Diploma or Degree programs (Respiratory Therapist, McMaster University Bachelor of Science in Nursing, Health Informatics Degree, etc). Students wishing to enter Biotechnology Technician, Dietician, Pre-Service Fire-fighter, Practical Nursing, Personal Support Worker, Paramedic, and Occupational Therapy Assistant/Physiotherapy Assistant programs are still able to do so by taking either the one-semester General Arts and Science Health Option or upon completion of this one-year Pre-Health certificate program.

Students will be introduced to the Health Sciences field, to college life and college workload, and will be able to increase their competitiveness to support their application to Health Sciences advanced diploma or degree programs.

Note:

This is an oversubscribed program.

### **Confederation College Pre-Health Sciences**

1-year, Ontario College Certificate Program

#### **Pre-Health Sciences**

You have a strong interest in a health-care-related career, but don't meet the necessary entrance requirements. A health-care career can still happen for you!



The Pre-Health Sciences program is designed to provide you with the skills and academic requirements necessary for admission into a postsecondary college or university health care program. Past graduates went on to college or university programs such as Paramedics, Medical Radiation Technology, Dental Hygiene, Practical Nursing, Bachelor of Science in Nursing, General Science and Kinesiology.

#### Georgian College BScN degree completion for RPN's

University of Ontario Institute of Technology (UOIT)



Registered Practical Nursing to BScN (Degree Completion) on the Barrie Campus or Online

The University of Ontario Institute of Technology's Faculty of Health Sciences in collaboration with Georgian College is offering a BSCN Degree Completion for Registered Practical Nurses in under three years.

### Lambton College Pre-Health Sciences (BScN)

#### Pre-Health Sciences (BScN)

Program

**PNSG** 

Code:

Credential Ontario College

Certificate Type:

Length: One-Year

Intake(s): September

Intake Status: Open



#### PROGRAM INFORMATION

This program is a transition year for secondary school graduates and mature students who lack the prerequisites to be accepted into the Bachelor of Science in Nursing (BScN) degree program offered in collaboration with University of Windsor.

To graduate from the Pre-Health Sciences - BScN certificate program, students must achieve a minimum grade of D (50%) in each course offered. However, in order to be considered for admission to the Bachelor of Science in Nursing program a Pre-Health graduate will need to have achieved the following:

Program grade point average of at least 2.7

A combined average of at least a B- (70%) in BIO-1205 and BIO-2205

A combined average of at least a B- (70%) in CHM-1255 and CHM-2255

Passing grade in all courses in both semesters.

Students in this program must apply to the BScN program by February 1 of the calendar year in which they wish to start the program to ensure that all additional requirements are met as outlined in the calendar for the BScN program.

For students not entering the Bachelor of Science - Nursing (BSCN) program from high school, but rather enter through the Pre-Health Sciences - BSCN (PNSG) program, only graduates from Lambton College and St. Clair College programs will be guaranteed consideration. Bonus points for Lambton College Pre-Nursing Program will not be assigned.

#### Loyalist College Pre-Health Science

PREH - Pre-Health Science

**Program Entry SEPTEMBER** Program Length One-Year Ontario College Certificate

Contact: E-mail:

Pam Fairbank fairbank@loyalistc.on.ca

**Highlights Career Opportunities Program Description Approximate Cost Admission Requirements** Loyalist / University Transfer

Curriculum Highlights

Build academic skills and gain career confidence.

Take advantage of practical career guidance and personal faculty assistance.

Obtain transfer credits to other post-secondary college programs.

All credits are transferable to the two-year Arts and Science diploma at Loyalist.

#### **Career Opportunities**

The Pre-Health Science certificate may be a bridge to college and/or university health science programs. Graduates who maintain a minimum average of 70% in the certificate program, and meet specific entrance requirements, will be eligible for admission to the Brock University/Loyalist College collaborative Nursing Degree or other university-oriented science studies.

#### **Program Description**

High school graduates and mature students returning to school may have difficulty gaining entrance to the college health science program of their choice. The Pre-Health Science Certificate allows learners to upgrade their skills and knowledge in a higher-learning environment. The curriculum provides a solid foundation in biology, chemistry, math and communication skills that are critical to success in a healthrelated career.

In the second semester, students choose electives that will support either a diploma or degree orientation. All course work can be applied toward the elective requirements of a two-year diploma in General Arts and Science.

#### Mohawk College Pre-Health Certificate

Pre-Health Certificate - 246

Program overview:

START DATE: September, January

PROGRAM STATUS: Open for September 2012, Waitlisted for September 2012, Open for

January 2013

SCHOOL: Interdisciplinary Studies

PROGRAM NUMBER: 246 PROGRAM LENGTH: 1 year

CAMPUS: Brantford Campus (Brantford), Fennell Campus (Hamilton)

CO-OP OPTION: No

ACCREDITATION: Ontario College Certificate

Campus	September 2012	January 2013
BRANTFORD CAMPUS	<b> ✓</b> OPEN	
FENNELL CAMPUS	<b>WAITLISTED</b>	<b> ✓</b> OPEN

#### Program summary:

Mohawk College's one-year Pre-Health certificate program introduces students to the Health Sciences field, and prepares them for success in additional Health Sciences related programs. Pre-Health is offered at our Fennell Campus in Hamilton, Ontario and at our Brantford campus in Brantford, Ontario.

Students may enter with advanced standing into the General Arts & Science program.

PLEASE NOTE: If you have previous university degree credit(s), you are NOT eligible to use Pre-Health as a route to apply to the Mohawk/McMaster BScN program. Pre-Health does NOT lead to the Medical Radiation Sciences degree program.

#### Read more:

**Program Description** 

**Admission Requirements** 

**Academic Opportunities** 

Program of Studies (POS) - Course Overview & Descriptions

**Program Learning Outcomes** 

Contact the Program Coordinator - Fennell

Contact the Program Coordinator - Brantford

Programs » Academic and General Studies » Pre-Health Sciences (University)

Niagara College Pre-Health (University)



Post Secondary Pre-Health Sciences (University) One Year | Ontario College Certificate Program Code 0804 **Welland Campus** 

...I couldn't imagine not taking this program and going to University without it. Most importantly the faculty cares about the content of what they are teaching and their students. This makes the program successful.

Brian Garden, Pre-Health Sciences (University) graduate, 1st year BSc student at Brock University

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#### **Career Opportunities**

If you want to study nursing or another health sciences field at the university level but lack a science background or are returning to school as a mature student, this program is an excellent bridge.

Take Pre-Health Sciences (University) to prepare for success in one of these university programs:

Biochemistry

**Biomedical Science** 

Biology

Chemistry

Kinesiology

Medical Laboratory Technology

Neuroscience

Nursing (four-year university or collaborative)

Respiratory Therapy

In addition, graduates are prepared for any of the programs listed under Pre-Health Sciences (College).

Note: Medical Laboratory Technology and Respiratory Therapy are still taught at some colleges but are moving to the university level. Therefore, students seeking admission into these programs should take Pre-Health Sciences (University).

#### **Northern College Pre-Health Sciences**

Program Title: Pre-Health Sciences Program Status: Open

Credential Earned: Ontario College Certificate Delivery: Full-Time

Program Codes: NORT - H142 (PC) Program Length: 2 Semesters

NORT - H145 (JB)

NORT - H143W (KL)

#### Program Description:



The Pre-Health Sciences program provides students with the opportunity to study subject areas relevant to health career programs at Northern College and affiliate partners and to instill an appreciation of the professional roles, responsibilities and academic requirements of health care disciplines. The goal of the program is to prepare men and women for their chosen health career program. Completing both semesters of this program successfully will provide the prerequisites for entry into the Bachelor of Science – Nursing, Practical Nursing, and Paramedic programs.

Admission Requirements:

Ontario Secondary School Diploma (OSSD)

Grade 12 English (C, U)

Grade 11 Math (C, M, U) (Preferably Functions and Relations or equivalent)

Or equivalent.

Note: It is strongly recommended that students entering the Pre-Health Sciences program have access to the Internet.

In this program, Biology, Chemistry and Mathematics will provide students with a solid background to satisfy the entrance requirements for Northern's Nursing Baccalaureate, RPN and Paramedic programs. Students wishing to enter into the Baccalaureate program in Nursing must have an overall GPA of 2.8 (B average) in the Pre-Health Sciences program to meet admission criteria required by university partner, Laurentian University.

### St. Clair College Pre-Health Science (Nursing BScN)

**Pre-Health Science - Nursing** 

Campus:

South Campus - Windsor (C901) Thames Campus - Chatham (K900)

Program Length:

One Year - Ontario College Certificate

Starts:

September and January

Contact: Windsor Cheryl Yako (519) 972-2727 ext. 4384 cyako@stclaircollege.ca Chatham **Bob Birnie** (519) 354-9714 ext. 3272

rbirnie@stclaircollege.ca

#### **ADMISSION REQUIREMENTS**

OSSD with the majority of courses at the College (C), University (U), University/College (M) or Open (O) level qualify for admission to this program.

Mature students - See <u>Admission Procedures</u> for details.

#### **PROGRAM GOALS**

This program is designed to give students the necessary skills and course background to apply to the Bachelor of Science Nursing (BScN). To be considered for admission to the Nursing program the following minimum program requirements must be achieved: cumulative average of B (70%) in all courses; combined average of B (70%) in GAS11, GAS21, GAS11A & GAS21A

Note: The Pre-Nursing program provides successful graduates with consideration for admission to the Bachelor of Science Nursing program (BScN) only and does not qualify students for admission to other University programs.

#### St. Lawrence College Pre-Health Sciences (BScN)

#### Pre-Health Sciences (Kingston)

This program is specifically designed to prepare students to meet the academic requirements to be eligible for our Bachelor of Science in Nursing program.

Students will study required courses such as English, Biology, Chemistry, Mathematics and Physical Sciences with some flexibility to choose career-enhancing courses, such as Sociology and Psychology. The Communication courses enable students to improve academic writing and critical thinking skills which are important to their success in future college and university programs and in their future

professional careers. Students receive hands-on experience in microscopy and other basic laboratory skills and may use the Nursing Simulation Lab to enhance their learning of Anatomy and Physiology. Students seeking admission into the Bachelor of Science in Nursing must maintain a 2.8 GPA in this program to be eligible for consideration. Pre Health Sciences also provides students with the entrance requirements for a variety of other Health Science programs, such as, Practical Nursing, Medical Laboratory Science, Biotechnology, and Paramedic.

**Printable PDF** 

#### **Sault College Pre-Health Sciences**

Pre-Health Sciences (3030)

Ontario College Certificate 1 Year - 2 Semesters

Overview

Courses

What You'll Need

**Books and Supplies** 

Other Information

**Program Overview** 

For those of you who may not have the math and science requirements from high school that you need to enter your field of study, or who aren't quite sure in which area of the health field you'd like to work, our pre-health sceinces program is for you.

Take this one year certificate program and explore the world of health sciences.

September and January Intakes are available for this program. Please contact the Registrar's Office for further information.

Courses in the Pre-Health Sciences program will give you excellent preparation for meeting many different admission requirements for different Health Sciences programs offered at Sault College or around the province in college or university.

You will need to make sure that the courses you take are the right ones needed to get into the program you want to study in the future. The program coordinator and academic assistant of the School of Health Sciences at Sault College can help you choose what to study so you're sure.

Also, the elective courses you take during your Pre-Health Sciences year cannot be re-used as electives. For example, if you take PSY102-3 or SOC120-3 in your Pre-Health Sciences program, you cannot also use them for advanced credit in another college or university program. You'll need to take them again, or another course, as part of your new program.

**Program Fact Sheet** 

### Seneca College Pre-Health Science

Pre-Health Science

Program Code: PHS Campus: King

**Duration:** 2 semesters (1 Year) Start Dates: Fall, Winter

Start dates are subject to change

Credential Awarded: Ontario College Certificate

#### **Program Description**

The Pre-Health Science program is designed for applicants who have completed secondary school or mature students returning to school, who do not have the requisite science and mathematics courses to gain entry into a nursing program. Upon successful completion of this program, you'll be prepared to meet the entrance requirements of a post-secondary health sciences program. Completion of this program does not, however, automatically ensure acceptance into such programs.

### Ministry of Training, Colleges and Universities

College					Weighti	ng/ Fundi	ing/Degree
				Preparatory Health			
LAMB	1058	Pre-health Sciences	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
LOYT	1112	Pre-health Sciences	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
MOHA	1219	Pre-health	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
NIAG	1180	Pre-health Sciences	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
NORT	1207	Pre-health Sciences	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
SAUL	1158	Pre-health Sciences	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
SENE	1227	Pre-health Science	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
SLAW	1184	Pre-health Science	41601	Sciences	1.00	1.10	1.00
		Preparatory Health		Preparatory Health			
SSFL	1188	Science	41601	Sciences	1.00	1.10	1.00
				Preparatory Health			
STCL	1170	Pre-health Sciences	41601	Sciences	1.00	1.10	1.00