REPORT OF ACADEMIC STANDARDS COMMITTEE

Report #W2011–1; March 2011

In this report the Academic Standards Committee (ASC) brings to Senate:

- its evaluation and recommendation on the proposed *Certificate in Health Informatics* from the Chang School;
- its evaluation and recommendation on the proposed *Certificate in Retail Management* from the Chang School;
- its evaluation and recommendation on the proposed *Certificate in Laboratory Practices Management* from the Chang School; and
- its evaluation and recommendation on the proposed *Certificate in Economics and Finance* from the Chang School.

A. Chang School Certificate in Health Informatics

Health Informatics (HI) is a new field that has evolved at the intersection of Information Technology (IT), healthcare, and management principles. The pervasive nature of IT-based solutions in healthcare has reduced healthcare expenses and improved the quality of care delivered to patients. The hiring requirements in the area of health informatics and health information management are projected to increase in the next four years by 26%, which corresponds to over 8,000 more professionals needed to meet the demand in this sector in Canada. There is an immediate demand to educate professionals in HI. A short-term strategy is to introduce health professionals or IT professionals to work in HI. A certificate program that has IT and health at its core with a special focus on management would be an ideal combination to address this shortfall of talent in HI.

Objectives of the Certificate:

- To offer employed healthcare or IT professionals a part-time program that can improve their knowledge in HI

- To offer other prospective professionals and managers a better understanding of the nuances of HI.

Admission Requirements: A minimum of one or more years relevant work experience in the health or IT sectors and OSSD with six Grade 12 U or M credits, or equivalent; or mature student status.

Curriculum Structure: The certificate will require completion of a total of ***eight courses***: Four required courses to provide core knowledge, and four electives which will supplement the additional knowledge requirements of each student depending on their backgrounds (i.e., health

sector or information technology). An eight-course certificate is appropriate due to the interdisciplinary nature of the curriculum and is supported by input from the industry sector and the requirements of COACH, the Canadian qualifying body for HI professionals.

Detailed Curriculum:

REQUIRED (four)		PREREQUISITES
CHIT 100	Introduction to Health Informatics	none
CHIT 201	Healthcare Interoperability	CHIT 100
CHIT 300	Introduction to Healthcare Human Computer Interface	CHIT 201
CHSM 301	The Healthcare System	none
ELECTIVES (choose four)		
CHIM 300	Managing Health Information Services	CHSM 301
CHSM 305	The Management Cycle	CHSM 301
CITM 301	Introduction to IT Infrastructure	CHIT 100 (or CITM 100)
CITM 305	Systems Analysis & Design	CHIT 100 (or CITM 100)
CITM 410	Business Process Design	CITM 305
CITM 500	Data Base Analysis and Design	CITM 305
CITM 505	Managing Information Systems	CHIT 100 (or CITM 100)
CITM 750	IT Project Management	CITM 305
CMHR 405	Organizational Behaviour & Interpersonal Skills	None
CMHR 650	Management of Change	CMHR 405
CZLW100	Information Access & Protection of Privacy Foundations	None
CZLWxxx	Health Information Access & Privacy	Tbc
CHIM 404*	Health Economics	CECN 104 and CECN 204 and CHIM 403
CHIM 405*	Issues in Health Information Management	CHIM 403 and CHIM 404 and HSM 408 and HSM 417 and HSM437

Students may select four electives from this list as they see fit. However, recognizing that students will typically be admitted with strength in either the health care sector or information technology, academic advising will be provided to help students select electives that complement their skills and competencies. The suggested pools of elective courses are:

Healthcare Professionals (4 electives)		IT Professionals (4 electives)	
Recommended for students with minimum with health background:		Recommended for students with minimum IT background	
CITM 301	Introduction to IT Infrastructure	CHIM 300	Managing Health Information Services
CITM 305	Systems Analysis & Design	CHSM 305	The Management Cycle
To increase IT skills, may take 2 of:			
CITM 410	Business Process Design	To cover gaps in IT background, may take two of:	
CITM 500	Data Base Analysis and Design	CITM 500	Data Base Analysis and Design
CITM 505	Managing Information Systems	CITM 505	Managing Information Systems
CITM 750	IT Project Management	CITM 750	IT Project Management
For an HR focus, students may take:		For an HR focus, students may take:	
CMHR 405	Organizational Behaviour & Interpersonal Skills	CMHR 405	Organizational Behaviour & Interpersonal Skills
CMHR 650	Management of Change	CMHR 650	Management of Change
For a policy focus, may take:		For a policy focus, may take:	
CZLW100	Information Access & Protection of Privacy Foundations	CZLW100	Information Access & Protection of Privacy Foundations

CZLWxxx	Health Information Access & Privacy	CZLWxxx	Health Information Access & Privacy
		To increase Health system understanding, may take:	
		CHIM 404	Health Economics
		CHIM 405	Issues in Health Information Management

Prerequisites: The long list of prerequisite courses for CHIM404 and CHIM405 will be dealt with by "permission of the program" for the certificate students. The long list of prerequisites for these courses is a reflection of their role in controlling admission to practica in the part-time degree in Health Information Management. The degree program is in the process of reviewing the requirements for admission to the practica and it is likely that this list of prerequisites will be reduced.

Curriculum Delivery: Initially all courses will be offered as in-class experiences, but there is a plan to develop distance/hybrid versions over time.

Follow-Up Reporting:

ASC requests that the program report back on the suitability of the eight-course curriculum model within two years of program launch.

ASC also requests that once the prerequisite review for CHIM404/405 in the part-time Health Information Management degree is complete, that the prerequisite conditions for the certificate be adjusted accordingly.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends:

That Senate approve the Certificate in Health Informatics.

B. Chang School Certificate in Retail Management

The retail sector is the largest employment sector in the country. Currently there is no continuing education package which provides working retail professionals with a curriculum covering the fundamentals of retail. The proposed certificate will fill this gap and provide students with the ability to choose electives based on broad interests, or a cluster of courses to enhance knowledge in specific areas (such as buying or operations), or management courses for those with entrepreneurial interests or broader management educational needs.

Objectives of the Certificate:

- To fill a national educational gap by providing an industry-recognized university credential – primarily via distance/hybrid offerings – for those with an interest in retail as a career.

- To provide retail industry employees and new Canadians who seek entry points into domestic retail organizations with opportunities for personal development and potential career advancement by building on prior work and educational backgrounds.

- To expand the number of electives in retail subjects for all undergraduate students who seek retail as a major or minor, through full or part time studies.

Admission Requirements: OSSD with 12 U or M credits (or equivalent) or mature student status. A minimum of 1 to 2 years of relevant work experience in the retail industry is required unless granted special permission by the department.

Curriculum Structure: The curriculum consists of:

- Two required foundations courses (CRMG200 *Introduction to Retail*, and CRMG302 *Retail Consumer Insight*);

- A selection of four courses from a list of 21.

Five new courses are being proposed (CRMG911, CRMG919, CRMG925, CRMG9zz and CZRMyyy). These will be phased-in over two years.

Note that all courses are degree credit courses except CZRMyyy (Industry Project). CZRMyyy is a non-degree, certificate credit course that will be available only with permission from the Department and will be graded on a pass-fail basis. It cannot be used towards degree credit.

The detailed curriculum is described below.

Prerequisites: CRMG200 will provide the prerequisite for many of the advanced courses. Other prerequisites are built into the certificate. Students will be able to complete the certificate without having to take courses outside the program.

Areas of Focus: Students may select their 4 electives so as to obtain focus in Buying, Operations or Entrepreneurial Management. Electives which support these areas are indicated in the proposal. Students may also choose to select freely from the entire set of 21 electives.

Curriculum Delivery: Each course consists of 42 course hours. The main delivery mode will be on-line. The foundation course CRMG200 and 13 electives are currently available in distance format. The plan is to provide the second foundation course (CRMG302) and at least 5 additional electives in distance format as well. There may be select hybrid/condensed offerings as well to facilitate the participation of working retail professionals.

The Industry Project CZRMyyy: This is an optional "capstone" project for (i) individual students with an interest in completing a major independent study or (ii) for a company-sponsored cohort (in partnership with a host organization) to provide an experiential learning project that is

integrated with corporate training initiatives and current retail problems. The course is graded on a Pass/Fail basis.

Program Launch Date: The proposed launch date is January 2012. Winter launch dates are unusual but there is a strong rationale in this case: January is a slow period in the retail cycle, making it a more attractive start date for working professionals.

Detailed Curriculum:

Course	Prerequisite
REQUIRED	
CRMG200– Introduction to Retail Management	None
CRMG302 – Retail Consumer Insight	CRMG 200
ELECTIVES (choose 4)	
CRMG301 – Retail Operations Processes and Value Chain	CRMG 200 and CQMS 102
CRMG303 – Service Quality Management	CRMG 200
CRMG400 – Buying Process 1	CRMG 200
CRMG434 – Introduction to Logistics and Supply Chain Management	None
CRMG452 – Visual Merchandising and Space Planning	CRMG 200
CRMG902 – Franchising	CRMG 301
CRMG907 – Relationship Marketing	CRMG 200
CRMG909 – Advanced Buying Process 2	CRMG 400
CRMG910 – Multichannel Retailing	CITM 350 or CRMG 200
CRMG911 - Retail Sales Management	CRMG 200
CRMG916 – Channel Management	CRMG 200 and CMKT 100
CRMG919 – Applied Demand Forecasting	CRMG 200
CRMG925 – Optimizing Retail Service Quality	CRMG 303
CRMG9zz – Category Management	TBD
CZRMyyy – Industry Project	Permission of Department
CENT500 – New Venture Start-up	None
CGMS200 – Introduction to Global Management	None
CMKT100- Principles of Marketing	None
CQMS102 – Business Statistics 1	None
CMHR405 – Organizational Behaviour and Interpersonal Skills	None
CMHR523 – Human Resources Management	None

Recommendation from ASC about the Industry Project CZRMyyy: The program prefers to use a Pass/Fail grading system for the capstone to accommodate the different backgrounds and needs of individual students and student groups. ASC recommends that this decision be reviewed,

assessed and, if deemed appropriate, revised after 3 cohorts have taken the capstone course. The reasons for this recommendation are:

- There are good pedagogic reasons for providing a letter grade for the capstone course, including improved student satisfaction with the evaluation process.

- Students in any Chang School certificate may use up to three transfer credits from previous study towards their certificate credits, but the grades in these courses are not used to calculate the cGPA. Similarly, a course graded P/F contributes to the required credits for graduation, but not to the cGPA. Therefore, it is possible for a student to complete the certificate with a cGPA based only on grades from 2 courses (6 courses in total – 3 transfer credits – capstone = 2).

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends:

That Senate approve the Certificate in Retail Management.

C. Chang School Certificate in Laboratory Practices Management

While science graduates from Ontario universities have the appropriate scientific and technical knowledge specific for their discipline, they often have a skills gap that may hinder them from securing relevant employment. The proposed *Certificate in Laboratory Practices Management* is designed to supplement undergraduate training in the sciences with skills and non-academic knowledge which managing work in a laboratory setting often requires. Ensuring employment-relevance is a high priority, and so the *Certificate* has been developed in close consultation with industry experts, faculty, and recent graduates of Ryerson's chemistry and biology undergraduate programs.

Goals of the Certificate: The Certificate's primary goal is to close the gap between what science undergraduates learn and what employers look for, in entry-level laboratory personnel. Inextricably linked to this goal is that of providing reputable, university-level education which elevates the competency and relative desirability of certificate graduates in their fields.

Note for Clarification: ASC notes that this certificate's content is not concerned with business management practices. It is concerned with the management of work and material resources (e.g., consumable supplies) in scientific laboratory settings.

Admission Requirements: The admission requirements are:

- Bachelors degree in a relevant science with a cGPA of 2.0, or equivalent; **OR**

- A post-secondary diploma in a relevant science with a cGPA of 2.0, or equivalent, subject to the approval of the academic coordinator; **OR**

- Two years of work experience in a laboratory setting in a technical capacity, subject to the approval of the academic coordinator.

Curriculum Structure: The *Certificate* program consists of 12 modules (8 compulsory and 4 electives). All modules are 21 hours long. The modular design provides students with great flexibility in the way they pursue the *Certificate*. The modules offered and needed for completion are focused on delivering laboratory management and technical based competencies. While no internal streams are built into the *Certificate* structure, it is anticipated that students may select more managerial-focused electives or more technical-focused electives depending upon their current employment and past experiences. The modules are all new and will have course codes CKLPxxx. The modules are indicated in the table below:

Compulsory Modules (choose a total of 8)	• Professional Laboratory Practice • Introduction to Laboratory Project Management • Introduction to Laboratory Regulations • Laboratory and Research Ethics • Standards and Good Practices • Sample Management • Laboratory Information Management • Data Handling
Elective Modules (choose a total of 4)	• Applied Technical Writing • Skills for Professional Practice • Introduction to Intellectual Property • Laboratory Quality Processes -Six Sigma and Continuous Improvement • Fundamentals of Clinical Research • Current Topics in Laboratory Science • Independent Study I • Independent Study II

Prerequisites: The module *Professional Laboratory Practice* is a prerequisite for all other modules delivering laboratory management related competencies. The module *Standards and Good Practices* is a prerequisite for all modules that are more technical in content. Students are required to complete both modules prior to registering in the other courses.

Recommendation from ASC on Participation Grades: A number of the modules attribute a significant weight to class participation (ranges from 0% to 30% of final course grade). ASC recommends that the usefulness of class participation as an evaluation tool be reviewed in each module over the first two cohorts of students. Decisions should then be made, on a module-by-module basis, whether to continue with the participation component or to develop other evaluation modes.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends:

That Senate approve the Certificate in Laboratory Practices Management.

D. Chang School Certificate in Economics and Finance

A joint Economics and Finance curriculum equips students with a range of tools that help them to translate the science of economics into bottom-line business decisions. Such a melding of theory and practice gives students a competitive edge compared with students who study only Economics or only Finance.

Economics and Finance graduates can find jobs in private sector organizations such as banks and other financial institutions, large corporations, investment firms and insurance companies. Their tasks include financial analysis, sales and production planning, budget analysis and financial planning. The public sector also offers graduates a wide array of careers, for example analysis and forecasting positions with a focus on collecting and analyzing data pertaining to economic indicators, employment trends and the economic effects of tax changes and legislation, auditor and financial analyst.

Objectives of the Certificate: The *Certificate*:

- Will help students advance their careers better than individual courses: certificates are recognized as credentials by employers and professional bodies.

- Will be an economically viable and concise professional development credential that is obtainable through continuing education.

- Will help students ladder to degree programs at Ryerson. Courses provide students with degree credit if they should apply for, and been accepted into, an undergraduate degree program.

Admission Requirements: O.S.S.D. with six Grade 12 U/M courses including Grade 12 U courses in English and Mathematics (one of grade 12 U Advanced Functions, Calculus and Vectors, or Mathematics of Data Management) with a minimum grade of 70 percent in each of these subjects, or mature student status.

Curriculum Structure: The *Certificate in Economics and Finance* will consist of eight (8) courses in total: six (6) required courses, and two (2) electives. In order to be eligible to participate in the *Certificate*, students must have completed two prerequisite courses, or their equivalent, as noted below.

Students will be given credit for the courses in this certificate for Ryerson's Bachelor of Arts in International Economics and Finance or for the Finance major of Ryerson's Bachelor of

Commerce in Business Management, provided they have applied for and been accepted into these programs.

Detailed Curriculum:

<u>Certificate Prerequisite Courses:</u> Students are expected to have taken these courses or their equivalents prior to registering for this certificate. If they have not done so, they need to take them prior to enrolling in the courses for which they are prerequisites.

CACC110 Financial Accounting for Accounting Majors (prerequisite for CFIN300)

CMTH189 Introduction to Mathematics for Economics (prerequisite for CECN129)

<u>Required Courses (6):</u>

CECN104 Introductory Microeconomics

CECN129 Statistics for Economics I (prerequisite CMTH189)

CECN204 Introductory Macroeconomics

CFIN300 Managerial Finance I (prerequisite CACC100 or CACC110 or Direct Entry)

CFIN401 Managerial Finance II (prerequisite CFIN300 or CECN320 or HTA602)

CFIN501 Investment Analysis I (prerequisite CFIN401)

<u>Electives (choose two):</u>

CECN301 Intermediate Macroeconomics I (prerequisites CECN104 and CECN204)

CECN504 Intermediate Microeconomics I (prerequisites CECN104 and CECN204)

CECN506 Money and Banking (prerequisites CECN104 and CECN204)

CECN606 International Monetary Economics (prerequisite CECN301)

CECN703 Public Finance I (new prerequisite CECN504)

CECN721 International Financial Markets (prerequisite CECN301)[1]

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[1] The topics of CECN721 and CFIN621 overlap to a large extent. Therefore, students are not allowed to choose both of these courses as electives.

CECN803 Public Finance II (new prerequisite CECN504)

CFIN502 Personal Financial Planning (prerequisite CFIN300)

CFIN510 Entrepreneurial Finance (prerequisite CFIN401)

CFIN512 Risk Management and Insurance (prerequisite CFIN300)

CFIN601 Investment Analysis II (prerequisite CFIN501)

CFIN612 Retirement and Estate Planning (prerequisite CFIN300, co-requisite CFIN502)

CFIN621 International Finance, formerly CIBS621 (prerequisite CFIN401).
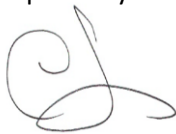
Areas of Elective Emphasis: The electives allow students to select areas of emphasis for their studies. These are: International Economics, Public Sector Economics; Investment Finance and Personal Finance.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends:

That Senate approve the Certificate in Economics and Finance.

Respectfully Submitted,

Chris Evans, Chair for the Committee

ASC Members:

Keith Alnwick, Registrar

Diane Schulman, Secretary of Senate (non-voting)

Chris Evans, ASC Vice-Chair, Vice Provost Academic

Robert Murray, Philosophy

Andrew Hunter, Philosophy

Jane Saber, Business Management

Pamela Robinson, Urban Planning

Jacquie Gingras, Nutrition

Jacob Friedman, Mechanical & Industrial Engineering

Noel George, Chemistry & Biology

Cecile Farnum, Library

Des Glynn, Continuing Education

Tim McLaren, Information Technology Management

Alexandra Bal, Image Arts

Gene Allen, Journalism

Andrew West, Politics & Public Administration

Jennifer Cartwright, Business Management