



February 24, 2015

Professor Sioban Nelson
Vice-Provost, Academic Programs
Office of the Vice-President and Provost
Simcoe Hall
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Follow-up Report: External Review of UTSC Joint Programs with Centennial College

Dear Sioban,

Thank you for your letter of January 14, 2015 requesting my one-year follow-up report to the May 2013 external reviews of our Joint programs with Centennial College:

- Specialist (Joint) program in Journalism (B.A.)
- Major (Joint) program in New Media Studies (B.A.)
- Specialist (Joint) program in Paramedicine (B.Sc.)

As your letter notes, a key recommendation of the external review committees for the Joint programs was that each program develop specific overall learning outcomes. As a first step towards this goal, in collaboration with our partners at Centennial College, we developed a mission statement and a list of program objectives for each program.

The process began in the Spring of 2014, at a regular meeting of the Joint Programs Steering Committee, which was attended by the Vice-Dean, Graduate Education and Program Development (UTSC); the Associate Vice-President, Academic (Centennial College); the Joint Programs Administrative Coordinator; and the program directors for all three Joint programs from both UTSC and Centennial College. The Vice-Dean and Vice-President tasked the program supervisors with developing a first draft of the mission statement for their programs, as well as refined program objectives. In addition, the group addressed other issues raised in the external review reports. This process continued into the Fall and Winter of 2014/5, with appropriate elements involving curricular change moving into the UTSC governance process in the Winter session. The resultant mission statements and program objectives are reported in the appendices attached to this letter.

1. Specialist (Joint) program in Journalism (B.A.)

- *Development of learning outcomes for the program*

One of the central aims of the Specialist (Joint) program in Journalism (B.A.) is to unite theoretical knowledge and practical experience; in other words, to demonstrate that theory and praxis are co-dependent. Upon completion of the program students will be

conversant with the primary concepts, theories and practices related to the changing fields of journalism, and will be able to apply their understanding to the changing landscape of current issues, events and the needs of our democracy. The Joint program prepares students in two important ways: first, for careers that take full advantage of their deep understanding of, and commitment to, the best that journalistic skills can offer; and second, for study at the graduate level.

Six learning outcomes have been identified for the program:

1. Develop an understanding of concepts, theories, and practices in the evolving field of journalism;
2. Develop critical awareness of current issues and events across today's societies through local, national, and international perspectives;
3. Develop the ability to assess and place information in context through critical and analytical thinking;
4. Develop an understanding of the influence and limitations of new digital forms;
5. Understand the various forms of journalistic writing for differing media platforms; and
6. Appreciate the ethical challenges of journalistic immediacy and contextualization.

These theory-centred outcomes, largely provided by UTSC, are buttressed by the more practical learning outcomes identified by Centennial College:

1. Apply analytical, writing, editing and other creative production skills to a variety of journalistic activities;
2. Report, in a way appropriate to the medium, a wide range of stories in an accurate, detailed, balanced, fair, and timely manner;
3. Prepare and edit content;
4. Apply production skills and make use of production equipment in the preparation of print content;
5. Apply computer skills to a variety of functions in journalism;
6. Function as part of journalistic team;
7. Apply a broad knowledge of current events and history to provide a context for journalism;
8. Develop a realistic view of the field of journalism and develop strategies for personal and professional development;
9. Complete all work in compliance with relevant law, standards, and the appropriate principles and practices of journalism; and
10. Prepare and deliver broadcasting content; apply production skills and make use of broadcast equipment in the preparation of broadcasting content.

A full mission statement for the program, which clearly reflects the dual theoretical underpinnings and practical skills of the discipline in the current forms of expression, as well as the complete articulation of the learning outcomes, can be found in Appendix A.

2. Major (Joint) program in New Media Studies (B.A.)

- *Development of learning outcomes for the program*

The Major (Joint) program in New Media Studies (B.A.) is a professionalization program designed to help students prepare for careers in web communication and new media industries. The unique structure of the Joint program provides students with a theoretical understanding of new media through academic study and practice-based digital media skills that prepare them for entry-level positions in new media industries, and allow students to continue academic study in new media and communication at the graduate level.

Six learning outcomes have been identified for the program:

1. Develop an understanding of media theory and the history of media in order to contextualize how media works in today's world, on both local and global scales;
2. Enhance awareness of the importance of media in the production and reproduction of contemporary cultures;
3. Develop a capacity to critically evaluate the content of media, including the visual and aural, and analyze its underlying ideologies and implications;
4. Critically evaluate the constraints of, as well as the opportunities provided by, modern media institutions and information technologies to nourish humanistic and democratic values;
5. Gain competency with a set of media theories applicable to students' own social contexts in order to better understand relationships between media and how individuals understand the self; and
6. Use digital technologies to create media projects and thereby also acquire basic media production and dissemination skills as well as a better understanding of media platforms, rhetoric and logic.

These theory-centred outcomes largely provided by UTSC are buttressed by the more practical learning outcomes identified by Centennial College:

1. Hand-code HTML, CSS level 1 and 2, Javascript and Actionscript to produce web pages;
2. Operate and evaluate a variety of computer hardware, software and peripheral devices in the development of new media design, including Adobe Suite;
3. Develop, produce and implement audio, video and text content for new media environments such as social networks, interactive installations, entertainment, public environments, and interactive presentations;
4. Write appropriate content for new media using techniques of non-linearity and interactivity;
5. Create and present, as a member of a production team, new media project proposals;
6. Prepare a solid financial business plan for a new media venture;
7. Analyze, design and test navigation and interface for new media applications on multiple platforms.

8. Apply appropriate new media design and management strategies according to client preferences and project requirements; and
9. Evaluate the goals, norms and development of multimedia projects.

A full mission statement for the program, as well as the complete articulation of the learning outcomes, can be found in Appendix B.

- *Integration of the teaching schedule between UTSC and Centennial College*

During the 2014-15 academic year, New Media Studies has introduced changes to the sequencing of their program delivery so as to better integrate the UTSC and Centennial components of the program; these changes will be effective as of the 2015-16 academic year. Specifically, the program is being restructured so that students will spend year two at Centennial College, where they will complete most of their New Media Studies (NME) program requirements. An existing required course – MDSB61H3 will be taken at UTSC during the fall semester of the second year because it is connected to the practice-based Centennial studies. MDSB62H3 (existing program requirement) and MDSB63H3 (new program requirement), which have a substantial practice-based digital project component, will be taken in year three. A table, which identifies the sequence of courses, and also where the courses are held, is provided below:

Table 1: Course Selection Guidelines

Year of Study	Fall Session	Winter Session
Year 1 (at UTSC) Note: students should also take ACMA01H3 during their first year)	MDSA01H3* *also offered in the Summer session	MDSA02H3
Year 2 (at Centennial College) Notes: 1. Students must be enrolled full-time in year 2 of the program. 2. Due to the course and project work load in the Winter session, students are not permitted to take additional courses at UTSC.	MDSB61H3* New Media Group 1:** NMEA01H3 NMEA02H3 NMEA03H3 NMEA04H3 *scheduled at UTSC **students must enrol in all courses in Group 1	New Media Group 2:* NMEB05H3 NMEB06H3 NMEB08H3 NMEB09H3 NMEB10H3 *students must enrol in all courses in Group 2
Year 3 (at UTSC) Note: students complete their Media Studies electives in year 3 and year 4	MDSB63H3	MDSB62H3* *offered Fall and Winter

Year of Study	Fall Session	Winter Session
Year 4 (at UTSC)	NMED01H3	NMED20H3
Note: students complete their Media Studies electives in year 3 and year 4		

3. Specialist (Joint) program in Paramedicine (B.Sc.)

- *Development of learning outcomes and the requirements of the Paramedicine program*

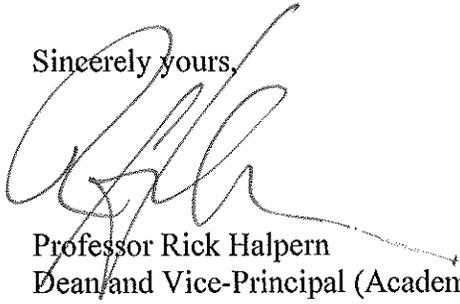
The Specialist (Joint) program in Paramedicine (B.Sc.) is a unique program in Canada. Taught by leading academics and professionals, it is grounded in the fundamentals of life science and focuses on the critical thinking, research and laboratory experience needed to save lives. Students examine, and are immersed in, the spectrum of emergency, medical, trauma and psychological situations faced by today's healthcare professionals. The program prepares students for the Ontario Ministry of Health Advanced Emergency Medical Care Attendant (AEMCA) exam, and positions graduates for advanced careers in the field of emergency medical services.

Six learning outcomes, which are fully integrated between UTSC and Centennial College, have been identified for the program:

1. Develop a foundational understanding of areas of study related to paramedicine (e.g., biology, chemistry, mathematics, and psychology); in upper years, develop a depth of knowledge in specialized areas of study;
2. Apply skills critically in the field; evaluate and provide appropriate care based on the training as a primary care paramedic;
3. Properly solve appropriate scenarios and assess what is needed relevant to EMS work;
4. Analyze data and recognize limitations in the knowledge collected;
5. Develop the required reading, listening, oral and written communication skills necessary to articulate the concepts that are the foundation of the EMS field; and
6. Develop professional capacity, and a sense of the role of paramedics in society, as well as the role of being an independent and knowledgeable learner for life success.

A full mission statement for the program, as well as the complete articulation of the learning outcomes, can be found in Appendix C. We note that the curriculum is highly prescribed by external regulatory bodies that provide licensure for graduates of the Joint program, following successful completion of the Ontario Ministry of Health Advanced Emergency Medical Care Attendant (AEMCA) examinations (1-5). In addition we are providing training for the future leaders in the paramedic field (6).

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Rick Halpern', with a long horizontal flourish extending to the right.

Professor Rick Halpern
Dean and Vice-Principal (Academic)

Appendix A: Specialist (Joint) Program in Journalism (B.A.)

Mission Statement:

The Specialist (Joint) program in Journalism (B.A.) promotes excellence in critical thinking, research, writing and communications skills, which are brought to bear on issues concerning news media, journalism and society. Through the program, students acquire the knowledge and skills to tell the story from every angle in every media form relevant to today’s audiences. With experience gained from producing a real community newspaper, online publications and Internet radio, our students are ready for professional careers in the media and/or in public and private sector communications.

Curriculum & Program Delivery

Learning outcomes for the Specialist (Joint) program in Journalism (BA) have been developed in alignment with the following guiding principles:

1. University of Toronto Scarborough Undergraduate Degree Level Expectations
2. The Journalism School Curriculum Enrichment Program – Carnegie-Knight Initiative on the Future of Journalism Education (October 2008)
3. Journalism Program Standard: The approved program standard for Journalism program of instruction leading to an Ontario College Advanced Diploma delivered by Ontario Colleges of Applied Arts and Technology – Ministry of Training, Colleges and Universities, Government of Ontario (July 2008)

UTSC Learning Outcomes	Joint Program in Journalism	Centennial College Learning Outcomes
<ol style="list-style-type: none"> 1. Develop an understanding of concepts, theories, and practices in the ever-evolving field of journalism. 2. Develop critical awareness of current issues and events across today’s societies through local, national, and international perspectives. 3. Develop the ability to assess and place information in context through critical and analytical thinking. 4. Develop an understanding of the influence and limitations of new digital forms. 5. Understand the various forms of journalistic writing for differing media platforms. 6. Appreciate the ethical challenges of journalistic immediacy and contextualization. 	<p>Program Delivery by Year</p> <p><u>Year 1 (UTSC)</u></p> <ul style="list-style-type: none"> • MDSA02H3 History of Media and Technology • JOUA01H3 Introduction to Journalism I • JOUA02H3 Introduction to Journalism II • ACMA01H3 Exploring Key Questions in Humanities <p>First year introduces students to the historic evolution of journalism, how it is created, distributed and used. Students learn to analyze forms of journalism to comment on their effectiveness. They are taught the elements of ethical situations and how journalism must function to</p>	<ol style="list-style-type: none"> 1. Apply analytical, writing, editing, and other creative production skills to a variety of journalistic activities. 2. Report, in a way appropriate to the medium, a wide range of stories in an accurate, detailed, balanced, fair, and timely manner. 3. Prepare and edit content. 4. Apply production skills and make use of production equipment in the preparation of print content. 5. Apply computer skills to a variety of functions in journalism.

	<p>serve the needs of a democracy.</p> <p><u>Year 2 (UTSC)</u></p> <ul style="list-style-type: none"> • JOUB24H3 Journalism in the Age of New Media • JOUB01H3 Covering Immigration and Transnational Issues • JOUB02H3 Critical Journalism • JOUB39H3 Fundamentals of Journalistic Writing • ACMA02H3 Inquiry and Reasoning in the Humanities <p>The second year provides students with a broad overview of good writing styles, which words and structures are the best tools for effective journalism through intensive writing assignments. Students also learn how digital/new media are changing the role of the journalist and the consumer of information in a diverse and complex environment. These courses prepare the students for the skillset training they will receive at Centennial.</p> <p><u>Year 3 (Centennial)</u></p> <ul style="list-style-type: none"> • JOUA06H3 Journalism Law and Ethics • JOUB03H3 Magazine/Freelance Journalism • JOUB05H3 Advanced Interviewing Techniques • JOUB10H3 News Laboratory I • JOUB11H3 News Reporting • JOUB14H3 Journalism Design • JOUB17H3 Radio News • JOUB18H3 Imaging: Photography for Journalists • JOUB20H3 Multiplatform Journalism <p>The third year focuses on skillset</p>	<p>6. Function as part of a journalistic team.</p> <p>7. Apply a broad knowledge of current events and affairs, and history to provide a context for journalism.</p> <p>8. Develop a realistic view of the journalism field and develop strategies for personal and professional development to manage job stress, enhance work performance, and maximize professional opportunities, including self-employment.</p> <p>9. Complete all work in compliance with relevant law, standards, and the appropriate principles and practices of journalism.</p> <p>10. Prepare and deliver broadcasting content. Apply production skills and make use of broadcast equipment in the preparation of broadcasting content.</p>
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	<p>training including interviewing, newspaper production, multiplatform journalism and design, photojournalism, radio and television along with their digital expressions.</p> <p><u>Year 4 (Centennial/UTSC)</u></p> <ul style="list-style-type: none"> • JOUC13H3 Beat Reporting • JOUC16Y3 News Lab II • JOUC17H3 Television News • JOUC25H3 Field Placement • JOUD10H3 Senior Seminar in Journalism <p>Fourth year is a combination of a return to UTSC for the capstone course in which the students prepare an original project that can be the basis for a presentation to a future employer. The Field Placement as internship is arranged through Centennial and is designed to give the students real-time experience in a contemporary media and journalistic setting.</p>	
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Students may take a field placement, during an extra summer semester at Centennial College and earn an Ontario College Advanced Diploma in Journalism in addition to an Honors Bachelor of Arts degree from the University of Toronto.

Appendix B: Major (Joint) program in New Media Studies (B.A.)

Mission Statement:

The Major (Joint) program in New Media Studies (B.A.) fosters critical, engaged and creative students who have the knowledge and skills needed to communicate effectively in written and visual modalities through the use of new and emerging digital media technologies. The curriculum is divided between academic study of media and new media from theoretical, historical, cultural and global points of view at UTSC and a year of practicum courses in new media design and communication at Centennial College.

Curriculum & Program Delivery

Learning outcomes for the Major (Joint) program in New Media Studies (B.A.) have been developed in alignment with the following guiding principles:

1. University of Toronto Scarborough Undergraduate Degree Level Expectations
2. Ontario Provincial Program Standard Vocational Learning Outcomes/Program Description – Rich Media (MTCU #79403)

UTSC Learning Outcomes	Joint Program in New Media Studies	Centennial College Learning Outcomes
<p>1. Develop an understanding of media theory and the history of media in order to contextualize how media works in today's world, on both local and global scales.</p> <p>2. Enhance awareness of the importance of media in the production and reproduction of contemporary cultures.</p> <p>3. Develop a capacity to critically evaluate the content of media, including the visual and aural, and analyze its underlying ideologies and implications.</p> <p>4. Critically evaluate the constraints of, as well as the opportunities provided by, modern media institutions and information technologies to nourish humanistic and democratic values.</p> <p>5. Gain competency with a set of media theories applicable to students' own social contexts in order to better understand relationships between media and how individuals understand the</p>	<p>Program Delivery by Year (Note: Reflects proposed changes in program structure)</p> <p>Year 1</p> <p>Fall: MDSA01H3 Introduction to Media Studies (UTSC)</p> <p>Winter: MDSA02H3 History of Media (UTSC)</p> <p>First-year introduces students to media studies, critical-theoretical approaches to understanding media, and a historical contextualization of media. Meets UTSC learning objectives 1, 2, 3, 4, 5.</p> <p>Year 2</p> <p>Fall: MDSB61H3 Mapping New Media (UTSC) (UTSC learning outcomes 1, 2, 3, 4, 5, with a</p>	<p>1. Hand code HTML, CSS level 1 and 2, Javascript and Actionscript to produce web pages.</p> <p>2. Operate and evaluate a variety of computer hardware, software and peripheral devices in the development of new media design, including Adobe Suite.</p> <p>3. Develop, produce and implement audio, video and text content for new media environments such as social networks, interactive installations, entertainment, public environments, and interactive presentations.</p> <p>4. Write appropriate content for new media using techniques of non-linearity and interactivity.</p> <p>5. Create and present, as a member of a production team, new media project proposals. Project proposals will include project schedules, design</p>

<p>self.</p> <p>6. Use digital technologies to create media projects and thereby also acquire basic media production and dissemination skills as well as a better understanding of media platforms, rhetoric and logic.</p>	<p>special emphasis on 6 for NME students)</p> <p>NMEA01H3 Digital Fundamentals (CC) (focus on coding; CC learning outcomes 1 and 2)</p> <p>NMEA02H3 Introduction to New Media Communications (CC)</p> <p>NMEA03H3 The Language of Design (CC)</p> <p>NMEA04H3 Interface Design, Navigation and Interaction I (focus on interface design and software)</p> <p>Winter: NMEB05H3 Interface Design, Navigation and Interaction II</p> <p>NMEB06H3 Project Development and Presentation (focus on project management, client project, and entrepreneurship; CC learning outcomes 3, 5, 6, 8, 9)</p> <p>NMEB08H3 Application Software for Interactive Media</p> <p>NMEB09H3 Sound Design</p> <p>NMEB10H3 Design for New Media</p> <p>The second year provides students with a broad overview of new media design and communication with a focus on the development of basic technical skills that prepare students for more advanced digital projects in years 3 and 4.</p> <p><u>Year 3</u></p> <p>Fall: MDSB62H3 Visual Culture and Communication (UTSC)</p> <p>Winter: MDSB63H3 Sound and Visual Media (UTSC)</p>	<p>documents, advanced information architecture maps, along with marketing documents and prototype solutions that meet the clients' needs.</p> <p>6. Prepare a solid financial business plan for a new media venture.</p> <p>7. Analyze, design and test navigation and interface for new media applications on multiple platforms.</p> <p>8. Apply appropriate new media design and management strategies according to client preferences and project requirements.</p> <p>9. Evaluate the goals, norms and development of multimedia projects.</p>
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	<p>(Course builds on work students do at CC in NMEB09H3 Sound Design)</p> <p>The third year focuses on digital projects. The academic content meets UTSC learning objectives 1-6 and the technical content meets CC learning objectives 1, 3, 4, 9.</p> <p><u>Year 4</u></p> <p>Fall: NMED20H3 Theory and Practice of New Media (UTSC)</p> <p>Winter: NMED01H3 New Media Senior Project (UTSC)</p> <p>The fourth year focuses on advanced digital projects. Students continue to refine their technical skills while studying new media theory and practice from an academic arts perspective; in the second semester they develop a senior project to be included in their digital portfolio when entering the job market or when applying to graduate school for advanced study.</p> <p>The senior year invites students to put together the learning outcomes of coursework at UTSC and CC. The combination of critical media studies and digital media practice from industry and art perspectives allows students to develop critical <i>and</i> creative thinking skills that will serve them well no matter their digital future.</p>	
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Appendix C: Specialist (Joint) program in Paramedicine (B.Sc.)

Mission Statement:

The Specialist (Joint) program in Paramedicine (B.Sc.) is a leader in the field of Paramedicine education and unique in Canada. Designed with the shared vision and expertise of UTSC and Centennial College, it provides learners with enhanced career, academic, and research opportunities in the field of Paramedicine. The concurrent acquisition of the entry to practice Primary Care Paramedic diploma, in conjunction with the attainment of a strong academic background in the field of Biology, positions graduates as leaders in the field of Paramedicine. This dual education provides students with the foundational knowledge, breadth in education, critical thinking and practical skills needed for success.

Objectives:

- 1) To give students the opportunity to achieve a diploma and degree in four years.
- 2) To prepare students to write examinations to be certified as a Primary Care Paramedic.
- 3) To provide a skill set applicable to advancement in a paramedic career, enhancing opportunity for contributions to clinical instruction and research within the field.

Learning Outcomes:

Degree Level Expectations	Program Learning Outcomes – e.g. what students will know or be able to do at the completion of the program	How the program design / structure supports the degree level expectations
<p>1. Depth and Breadth of Knowledge</p> <p>Depth of Knowledge: is attained through a progression of introductory, core and specialized courses. Specialized courses will normally be at the C and D levels.</p> <p>Breadth of Knowledge: students will gain an appreciation of the variety of modes of thinking, methods of inquiry and</p>	<p>Develop a foundational understanding of areas of study related to Paramedicine, such as Biology, Chemistry, Math and Psychology. In upper years, develop a depth of knowledge in specialized areas of study that are directly related to Paramedicine, such as paramedicine, human biology, and human health and disease.</p>	<p>The first year and second year courses at UTSC provide the initial support to the development of degree expectations. This is followed by more in-depth knowledge acquisition, with an increase of relevant courses in the third and fourth years.</p> <p>The core and breadth requirements obtained in the second and third years are paired with the detailed knowledge needed specifically for training as a paramedic and for successful entry into the Paramedicine field. This is provided in a logical progression with 7.5 paramedic-credit courses offered through Centennial in years two and three of the program. Together, the curriculum supports the acquisition of knowledge using a variety</p>

<p>analysis, and ways of understanding the world that underpin different intellectual fields.</p>		<p>of modes including experiential learning through laboratories, simulations and fieldwork. The program outcomes provide students with a number of techniques to enhance knowledge acquisition including strong reading, writing and critical analysis skills. These skill sets are also translational allowing the student to find success both inside the Paramedicine field, and in related fields as the students have acquired an excellent ability to remain lifelong learners.</p>
<p>2. Knowledge of Methodologies</p> <p>Students have a working knowledge of different methodologies and approaches relevant to their area of study. They are able to evaluate the efficacy of different methodologies in addressing questions that arise in their area of study.</p>	<p>Students will be able to apply their skills critically in the field through the rigorous field-testing component at Centennial. They will be able to evaluate, and provide, appropriate care based on the training as a primary care paramedic. In addition, the complementary courses at UTSC will provide them with the problem solving and communication skills necessary in the methodologies used in the Paramedicine field.</p>	<p>The program is designed to allow the students to obtain knowledge of methodologies through a stepwise progression using a classic scaffolding approach. As the student progresses through each year of the program, the courses demand a more comprehensive approach to the integration of appropriate methodologies that are necessary for student success within the EMS field</p>
<p>3. Application of Knowledge</p> <p>Students are able to frame relevant questions for further inquiry. They are familiar with, or will be able to seek the tools with which, they can address such questions effectively.</p>	<p>The program demands that students are able to properly solve appropriate scenarios and assess what is needed relevant to EMS work. Class and laboratory work at both UTSC and Centennial provides the communication and research skills necessary for success in their chosen field.</p>	<p>The course progression within the program allows for a well-rounded student experience. The students are provided with a progressive integration of expectations within their fieldwork. Within the classroom/laboratories/seminars, the intensified demands placed on students by their third and fourth year courses provide the framework needed for students to develop the appropriate knowledge base. More importantly, this process enhances the development of confidence in knowledge application, which will position them for success in subsequent life experiences requiring knowledge acquisition and practice.</p>
<p>4. Awareness of Limits of Knowledge</p> <p>Students gain an understanding of the limits of their own knowledge and an appreciation of the uncertainty, ambiguity, and limits to our collective knowledge and how these</p>	<p>Upper year courses explain the limitations of knowledge based on the use of original research articles and simulations. Students must be able to analyze the data and recognize limitations in the knowledge collected. The program requires students to</p>	<p>Through the built-in experiential learning, and incremental exposure from first through fourth year to the relevant literature related to the field of Paramedicine and more generally to the field of Biology, students become informed consumers of knowledge.</p>

<p>might influence analyses and interpretations.</p>	<p>develop the requisite set of skills to recognize limitation of knowledge when working in their field placements and in the general field of Paramedicine.</p>	
<p>5. Communication Skills Students are able to communicate information, arguments, and analyses accurately and reliably, both orally and in writing. They learn to read and to listen critically.</p>	<p>Program outcomes through the majority of the second third and fourth year courses address the student's requisite development in both written and oral skills. The program requires students to clearly and concisely articulate their ideas. The program enhances their skills to allow interpretation of the concepts that are the foundation of the EMS field. Most importantly, the student is capable of reading, listening, and subsequently, using oral or written communication which clearly reflects their understanding of the ability to critically interpret relevant information.</p>	<p>The use of communication skills is omnipresent through the four years of courses. Simulation work, fieldwork, laboratory work, significant seminar presentation, and writing begin in first year in the laboratories of biology and chemistry and are also demonstrated in the assignments of psychology. It continues in second year at both UTSC and Centennial in laboratory work, written work, exams, simulations and fieldwork. By third and fourth year, the courses provide significant opportunities for the students to develop critical communication skills.</p>
<p>6. Autonomy and Professional Capacity The education students receive achieves the following broad goals:</p> <ul style="list-style-type: none"> • It gives students the skills and knowledge they need to become informed, independent and creative thinkers • It instills the awareness that knowledge and its applications are influenced by, and contribute to, society • It lays the foundation for learning as a life-long endeavour 	<p>The program outcomes related to the Paramedicine field, first and foremost, require development of professional capacity through the stringent requirements of the paramedic courses at Centennial. The UTSC courses require additional development of knowledge acquisition and independent thought. At the completion of the four-year program, students must have developed a sense of their role in society, and most importantly, the role of being an independent and knowledgeable learner for life success.</p>	<p>The concepts of "independent creative thought", "knowledge application", and "lifelong learning" are fostered by the programs integrative design. This starts in year one with gaining a wide knowledge base and with the introduction of independent thought. This is followed by more field intensive knowledge acquisition in second and third year. By second year, the students have begun to apply the knowledge acquired in simulations, fieldwork, and laboratories. In third and fourth year, students have an opportunity to work independently and develop the communication and critical thinking skills necessary for the development of the well-rounded learner, and productive member of society. Moreover, the highly integrated approach allows for the incremental development of leaders in the field of Paramedicine</p>