#### **AGENDA ITEM NO: 10.4**

# UNIVERSITY COUNCIL ACADEMIC PROGRAMS COMMITTEE FOR INFORMATION ONLY

**PRESENTED BY:** Len Proctor, Chair, Academic Programs Committee

**DATE OF MEETING:** October 21, 2010

**SUBJECT:** Items for Information:

**Academic Schedule 2011-12** 

Minor in Digital Culture & New Media

Termination of Regional & Urban Planning Coop Option Termination of Minor in Philosophy, Science & Biotechnology

**COUNCIL ACTION:** For information only

The Academic Programs Committee of Council approves the Academic Schedule each year and reports on the Schedule to University Council. The Committee approves the introduction or termination of new fields of specialization at the Minor level, and also approves the introduction or termination of program options.

#### **SUMMARY:**

#### 1. Academic Schedule 2011-12

The Committee reviewed the draft Academic Schedule in September, and approved the final version of the schedule on at its meeting on November 27. The Schedule has classes beginning on Tuesday, Sept. 8, the day after Labour Day. Orientation is the Thursday and Friday of the previous week. This allows 16 days for first term examinations, from Monday, December 5 to Thursday, Dec. 22. Second term classes begin on Wednesday, January 4, with 19 days for second term examinations from Monday, April 9 to Monday, April 30.

#### 2. Minor in Digital Culture & New Media

This is a 24-credit-unit Arts & Science minor in the new field of specialization of Digital Culture & New Media, available to students in Four-year and Honours programs. It has the objective to educate students in understanding, using, and creating digital tools. It includes two new courses: **INCC 210.3 Digital Communication and Design: Introduction to Methods & Applications,** and **INCC 401.3: Digital Culture and New Media: Capstone Collaborative Design Project.** This was approved by the Academic Programs Committee at its November 27 meeting following discussion with Vice-Dean David Parkinson.

### 3. Termination of Regional & Urban Planning program option in Cooperative Education, and termination of the minor in Philosophy, Science & Biotechnology

These terminations were approved by the Academic Programs Committee at its November 27 meeting following discussions with Vice-Dean Harley Dickinson and Vice-Dean David Parkinson.

#### **ATTACHMENTS:**

Academic Schedule 2011-12 and summary of teaching days

Proposal for Minor in Digital Culture & New Media

Report form for program termination for RUP Coop Option

Report form for program termination for minor in Philosophy, Science & Biotechnology

#### ACADEMIC SCHEDULE 2011-2012

| 12  |
|---|
|   |
| Canada Day – University closed  |
| Clinical rotations begin for Nursing September completion   |
| options   |
| Summer Term (Quarter 3) ends  |
| Summer Term (Quarter 3) final examinations begin. Midterm break begins for Summer Term 2 and multi-term classes - no classes.   |
| Summer Term (Quarter 3) final examinations end. Midterm break ends for Summer Term 2 and multi-term classes.  |
| Summer Term (Quarter 4) begins  |
|   |
| Saskatchewan Day – University closed  |
| Classes begin for all years of Physical Therapy   |
| Summer Term (Quarter 4, Term 2 & Two-term) ends   |
| Summer Term (Quarter 4, Term 2 & Two-term) final  |
| examinations begin  |
| Orientation for first-year Medicine   |
| Summer Term (Quarter 4, Term 2 & Two-term) final examinations end   |
| Orientation for first-year Dentistry  |
| Classes begin for all years Dentistry and all years Veterinary Medicine   |
| Classes begin for fourth-year Nutrition and first-, second-, and third-year Medicine  |
| Closing date for submission of applications for Fall Convocation  |
|   |
| Classes begin for third- and fourth-year Nursing  |
| Clinical rotations begin for fourth-year Nursing December completion option   |
| Orientation   |
| Orientation   |
| Labour Day - University closed  |
| Other classes begin   |
| Spring & Summer Terms deferred and supplemental examinations  |
| Last day for making changes in registration for Fall Term   |
| classes and for Fall & Winter two-term classes  |
| classes and for Fall & Winter two-term classes  Last day for Master's and Ph.D. students to submit approved thesis to ETD site and for departments to submit all supporting documentation, indicating completion of the graduate degree, in order to graduate at Fall Convocation |
|   |

| Tuesday, September 27,       | Last day of clinical rotations for Nursing September completion   |
|------------------------------|---|
| 2011                         | option  |
| OCTOBER                      |   |
| Monday, October 10, 2011     | Thanksgiving Day – University closed  |
| Saturday, October 15, 2011   | University Senate meeting   |
| Thursday, October 20, 2011   | University Council meeting  |
| Saturday, October 22, 2011   | Fall Convocation  |
| NOVEMBER                     |   |
| Friday, November 11, 2011    | Remembrance Day – University closed   |
| Tuesday, November 15,        | Last day for withdrawing from Fall Term classes without   |
| 2011**                       | academic penalty  |
| Thursday, November 17        | University Council meeting  |
| Wednesday, November 30,      | Last day of clinical rotations for fourth-year Nursing December   |
| 2011                         | completion option   |
| DECEMBER                     |   |
| Friday, December 2, 2011     | Last day of classes except for Medicine, fourth-year Nutrition and all years Veterinary Medicine  |
| Friday, December 2, 2011     | Last day of Fall Term classes for first-, second-, and third-year Dentistry and first-, second- and third-year Medicine                       |
| Monday, December 5,          | Other Fall Term final examinations begin, including night   |
| 2011                         | class examinations  |
| Monday, December 5, 2011     | First day of Fall Term final examinations for Law, first-, second-<br>and third-year Dentistry and first-, second- and third-year<br>Medicine |
| Friday, December 9, 2011     | Last day of classes for second- and third-year Veterinary Medicine  |
| Friday, December 9, 2011     | Last day of classes for fourth-year Dentistry   |
| Sunday, December 11,<br>2011 | Last day of clinical rotations for fourth-year Veterinary<br>Medicine   |
| Monday, December 12, 2011    | First day of Fall Term final examinations for second- and third-<br>year Veterinary Medicine  |
| Monday, December 12, 2011    | First day of Fall Term final examinations for fourth-year Dentistry   |
| Thursday, December 15,       | University Council meeting  |
| Friday, December 16, 2011    | Last day of Fall Term final examinations for all years Dentistry and first-, second- and third-year Medicine                                  |
| Friday, December 16, 2011    | Last day of classes for fourth-year Nutrition and first-year Veterinary Medicine  |
| Wednesday, December 21, 2011 | Last day of Fall Term final examinations for second- and third-<br>year Veterinary Medicine   |
| Thursday, December 22,       | Last day of Fall Term final examinations for all colleges   |
| 2011                         | except Dentistry, Law, Medicine and Veterinary Medicine   |
| Sunday, December 25,         | Christmas Day   |
| Monday, December 26,         | Boxing Day  |
| Tuesday, December 27,        | University closed (in lieu of Christmas Day)  |
| Wednesday, December 28,      | University closed   |
| Thursday, December 29,       | University closed   |

| Friday, December 30, 2011  | University closed  |
|----------------------------|--|
| January                    |  |
| Sunday, January 1, 2012    | New Year's Day   |
| Monday, January 2, 2012    | University closed (in lieu of New Year's Day)  |
| Tuesday, January 3, 2012   | Clinical rotations begin for fourth-year Nursing April completion  |
|                            | option   |
| Tuesday, January 3, 2012   | Classes resume for all years Dentistry, Medicine, Physical   |
|                            | Therapy and Veterinary Medicine  |
| Wednesday, January 4,      | Classes resume   |
| Tuesday, January 17, 2012  | Last day for making changes in registration for Winter Term classes  |
| Friday, January 20, 2012   | Closing date for applications for Fall Term supplemental and   |
|                            | deferred examinations for most colleges  |
| Thursday, January 26, 2012 | University Council meeting   |
| FEBRUARY                   |  |
| Wednesday, February 15,    | Last day for withdrawing without academic penalty from Fall &  |
| 2012**                     | Winter two-term classes  |
| Thursday, February 16,     | University Council meeting   |
| Monday, February 20, 2012  | Family Day – University closed   |
| Monday, February 20, 2012  | Mid-term break with no classes begins for all colleges except  |
|                            | fourth-year Veterinary Medicine, fourth-year Nutrition, fourth-  |
|                            | year Pharmacy, and fourth-year Medicine  |
| Tuesday, February 21,      | Fall Term deferred and supplemental examinations begin   |
| Saturday, February 25,     | Mid-term break ends for all colleges except Veterinary   |
| 2012                       | Medicine, fourth-year Nutrition and fourth-year Pharmacy   |
| Sunday, February 26, 2012  | Mid-term break ends for first- second- and third-year<br>Veterinary Medicine   |
| Monday, February 27, 2012  | Mid-term break begins for fourth-year Veterinary Medicine - no clinical rotations  |
| MARCH                      |  |
| Sunday, March 4, 2012      | Mid-term break ends for fourth-year Veterinary Medicine  |
| Thursday, March 15, 2012** | Last day for withdrawing from Winter Term classes without academic penalty   |
| Thursday, March 15, 2012   | University Council meeting   |
| Friday, March 30, 2012     | Last day of classes for fourth-year Dentistry  |
| Saturday, March 31, 2012*  | Closing date for submission of applications for Spring Convocation   |
| APRIL                      |  |
| Monday, April 2, 2012      | First day of final examinations for fourth-year Dentistry  |
| Tuesday, April 3, 2012     | Last day of clinical rotations for fourth-year Nursing April completion option and NEPS Second Degree Entry Option (2008 cohort)                               |
| Wednesday, April 4, 2012   | Last day of classes for Law  |
| Thursday, April 5, 2012    | Last day of classes except Dentistry, Law, Medicine, fourth-<br>year Nursing, fourth-year Nutrition, fourth-year Pharmacy and<br>all years Veterinary Medicine |
|                            |  |

| <b>E</b> 1 1 2 22 4 2     |   |
|---------------------------|---|
| Friday, April 6, 2012     | Good Friday – University closed   |
| Saturday, April 7, 2012   | First day of final examinations for Law   |
| Monday, April 9, 2012     | General Academic Assembly meeting   |
| Monday, April 9, 2012     | Winter Term and Fall & Winter two-term class final  |
| Friday April 40, 0040     | examinations begin  |
| Friday, April 13, 2012    | Last day for Master's and Ph.D. students to submit approved thesis to ETD site and for departments to submit all supporting documentation, indicating completion of the graduate degree, in order to graduate at Spring Convocation |
| Friday, April 13, 2012    | Last day of classes for final-year Medicine and second-year Veterinary Medicine   |
| Monday, April 16, 2012    | First day of final examinations for second-year Veterinary Medicine   |
| Wednesday, April 18, 2012 | Last day of classes for first-year Veterinary Medicine  |
| Thursday, April 20, 2012  | Last day of classes for third-year Veterinary Medicine  |
| Thursday, April 19, 2012  | University Council meeting  |
| Thursday, April 19, 2012  | Last day of examinations for fourth-year Dentistry  |
| Saturday, April 21, 2012  | First day of final examinations for first- year Veterinary Medicine   |
| Monday, April 23, 2012    | First day of final examinations for third- year Veterinary Medicine   |
| Friday, April 27, 2012    | Last day of classes for fourth-year Nutrition and fourth-year Pharmacy  |
| Friday, April 27, 2012    | Last day of classes for first- and third-year Dentistry and first-<br>year Medicine   |
| Saturday, April 28, 2012  | University Senate meeting   |
| Monday, April 30, 2012    | Last day of final examinations for all colleges except for Dentistry, first- and second-year Medicine, fourth-year Nutrition, fourth-year Pharmacy  |
| Monday, April 30, 2012    | Last day of clinical rotations for fourth-year Veterinary Medicine  |
| MAY                       |   |
| Tuesday, May 1, 2012      | First day of final examinations for first- and third-year Dentistry and first-year Medicine   |
| Tuesday, May 1, 2012      | First day of classes for fourth-year Nursing September and December completion options  |
| Wednesday, May 9, 2012    | Spring Term (Quarter 1, Term 1 & Two-term) begins   |
| Friday, May 11, 2012      | Last day of final examinations for first-year Medicine  |
| Friday, May 11, 2012      | Last day of classes for second-year Dentistry and second-year Medicine  |
| Saturday, May 12, 2012    | Certificate Programs Graduation Ceremony  |
| Monday, May 14, 2012      | First day of final examinations for second-year Dentistry and second-year Medicine  |
| Tuesday, May 15, 2012     | Faculty meetings  |
| Wednesday, May 16, 2012   | Faculty meetings  |
| •                         |   |

| Wednesday, May 16, 2012  | Closing date for submitting requests to most colleges for Winter Term and Fall & Winter two-term supplemental and             |
|--------------------------|---|
| Thursday May 47, 2040    | deferred examinations   |
| Thursday, May 17, 2012   | Faculty meetings  |
| Thursday, May 17, 2012   | University Council meeting  |
| Friday, May 18, 2012     | Last day of final examinations for first- and third-year Dentistry  |
| Monday, May 21, 2012     | Victoria Day – University closed  |
| Friday, May 25, 2012     | Last day of final examinations for second-year Medicine   |
| Monday, May 28, 2012     | Last day of final examinations for second-year Dentistry  |
| Wednesday, May 30, 2012  | Spring Term (Quarter 1) ends  |
| Thursday, May 31, 2012   | Spring Term (Quarter 1) final examinations begin. Midterm break begins for Spring Term 1 and multi-term classes - no classes. |
| JUNE                     |   |
| Friday, June 1, 2012     | Spring Term (Quarter 1) final examinations end. Mid-term break ends for Spring Term 1 and multi-term classes.                 |
| Monday, June 4, 2012     | Spring Term (Quarter 2) begins  |
| Tuesday, June 5, 2012    | Convocation   |
| Wednesday, June 6, 2012  | Convocation   |
| Thursday, June 7, 2012   | Convocation   |
| Thursday, June 14, 2012  | Winter Term and Fall & Winter two-term deferred and   |
|                          | supplemental examinations begin   |
| Thursday, June 21, 2012  | University Council meeting  |
| Friday, June 22, 2012    | Spring Term (Term 1 & Quarter 2) ends   |
| Friday, June 22, 2012    | Last day of classes for Nursing September and December completion options   |
| Monday, June 25, 2012    | Spring Term (Term 1 & Quarter 2) final examinations begin. Mid-term break begins for multi-term classes.                      |
| Wednesday, June 27, 2012 | Spring Term (Term 1 & Quarter 2) final examinations end. Mid-term break ends for multi-term classes.                          |
| Thursday, June 28, 2012  | Summer Term (Term 2 & Quarter 3) begins   |
| JULY                     |   |
| Sunday, July 1, 2012     | Canada Day – University closed  |
| Monday, July 2, 2012     | University closed (In lieu of Canada Day)   |
| Tuesday, July 3, 2012    | Clinical rotations begin for Nursing September completion options   |
| Thursday, July 19, 2012  | Summer Term (Quarter 3) ends  |
| Friday, July 20, 2012    | Summer Term (Quarter 3) final examinations begin. Midterm break begins for Summer Term 2 and multi-term classes - no classes. |
| Monday, July 23, 2012    | Summer Term (Quarter 3) final examinations end. Midterm break ends for Summer Term 2 and multi-term classes.                  |
| Tuesday, July 24, 2012   | Summer Term (Quarter 4) begins  |
|                          |   |

| AUGUST                     |  |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|
| Monday, August 6, 2012     | askatchewan Day – University closed  |  |  |  |  |  |
| Monday, August 13, 2012    | Classes begin for all years of Physical Therapy                              |  |  |  |  |  |
| Tuesday, August 14, 2012   | Spring & Summer Term (Quarter 4, Term 2 & Two-term) ends                     |  |  |  |  |  |
| Wednesday, August 15, 2012 | Spring & Summer Term (Quarter 4, Term 2 & Two-term) final examinations begin |  |  |  |  |  |
| Friday, August 17, 2012    | Spring & Summer Term (Quarter 4, Term 2 & Two-term) final examinations end   |  |  |  |  |  |
| Friday, August 31, 2012*   | Closing date for submission of applications for Fall Convocation             |  |  |  |  |  |

#### **SUMMARY OF TEACHING DAYS 2011-12**

#### Orientation on Thursday Sept 1st and Friday Sept 2nd

|  | M   | T   | W   | Th   | F    | Total      | Exam Days      |
|--|-----|-----|-----|------|------|------------|----------------|
| 2011 Sept. 6 (T) – Dec. 2 (F)                                | 11* | 13  | 13  | 13** | 12   | 62         | 16 (Dec. 5-22) |
| 2012 Jan. 4 (W) – Apr. 5 (Th)<br>* Thanksgiving – M. Oct. 10 | 12+ | 12+ | 13+ | 13+  | 12+# | )124<br>62 | 19 (Apr. 9-30) |

#### **SUMMARY OF TEACHING DAYS (past)**

|   | M        | T               | W              | Th             | F    | Tot | al      | <b>Exam Days</b> |
|---|----------|-----------------|----------------|----------------|------|-----|---------|------------------|
| 2010 Sept. 7 (T) – Dec. 3 (F)   | 11*      | 13              | 13             | 12**           | 13   | 62  |         | 15 (Dec. 6-22)   |
| 2011 Jan. 5 (W) – Apr. 8 (F)  * Thanksgiving – M. Oct. 11  ** Remembrance Day – Th. Nov. 11  + Midterm break – Feb. 21-25 (inclu  # Good Friday – Apr. 22 |          | 12+<br>mily Day | 13+<br>- M. Fe | 13+<br>eb. 21) | 13+# | 63  | )125    | 16 (Apr. 11-30)  |
| 2009 Sept. 3 (Th) - Dec. 4 (F)  | 11*      | 13              | 12**           | 14             | 14   | 64  |         | 14 (Dec. 7-22)   |
| 2010 Jan. 4 (M) – Apr. 8 (TH)  * Thanksgiving – M. Oct. 12  ** Remembrance Day – W. Nov. 11  + Midterm break – Feb. 15-19  # Good Friday – Apr. 2         | 13+      | 13+             | 13+            | 13+            | 11+# | 63  | )127    | 18 (Apr. 10-30)  |
| 2007 Sept. 5 (W) - Dec. 3 (M)   | 11**     | 12              | 13             | 13             | 13   | 62  |         | 15 (Dec. 5-21)   |
| 2008 Jan. 3 (Th) – Apr. 7 (M)  * Thanksgiving-M. Oct. 8  * Remembrance Day – Sun. Nov. 1  + Midterm break – Feb. 18-23  # Good Friday, Mar. 21            | 13+<br>1 | 12+             | 12+            | 13+            | 12+# | 62  | )124    | 18 (Apr. 10-30)  |
| 2006 Sept. 6 (W) - Dec. 4 (M)   | 12*      | 12              | 13             | 13             | 12** | 62  | }125    | 14 (Dec. 7-22)   |
| 2007 Jan. 3 (W) – Apr. 9 (M)<br>* Thanksgiving – M. Oct. 9  | 13+      | 12+             | 13+            | 13+            | 12+# | 63  | ) 1 Z J | 15 (Apr. 12-30)  |

<sup>\*\*</sup> Remembrance Day-Sat. Nov. 11

<sup>\*\*</sup> Remembrance Day – Fri. Nov. 11 + Midterm break – Feb. 20-24 (includes Family Day – M. Feb. 20)

<sup>#</sup> Good Friday – Apr. 6

<sup>+</sup> Midterm break-Feb. 12-17

<sup>#</sup> Good Friday, April 6

| 2005 Sept. 7 (W) - Dec. 5 (M)  | 12*             | 12        | 13  | 13   | 12** | 62 | 1405         | 13 (Dec. 8-22)  |
|--|-----------------|-----------|-----|------|------|----|--------------|-----------------|
| 2006 Jan. 4 (W) – Apr. 7 (F)  * Thanksgiving-M. Oct. 10  ** Remembrance Day-F. Nov. 11  + Midterm break-Feb. 13-18  # Good Friday-April 14 | 12+             | 12+       | 13+ | 13+  | 13+  | 63 | }125         | 17 (Apr. 10-29) |
| 2004 Sept. 8 – Dec. 6  | 12*             | 12        | 13  | 12** | 13   | 62 | }124         | 13 (Dec. 9-23)  |
| 2005 Jan. 5 – Apr. 8  * Thanksgiving-M. Oct 11  ** Remembrance Day-Th. Nov. 11  + Midterm break-Feb. 14-19  # Good Friday-March 25         | 12+             | 12+       | 13+ | 13+  | 12+# | 62 | }12 <b>4</b> | 17 (Apr. 12-30) |
| 2003 Sept. 4 – Dec. 3  | 12*             | 12**      | 13  | 13   | 13   | 63 | }125         | 13 (Dec. 6-20)  |
| 2004 Jan. 5 - Apr. 6  * Thanksgiving-M. Oct. 13  ** Remembrance Day-T. Nov. 11 + Midterm break-Feb. 16 – 21 # Good Friday-April 9          | 13+             | 13+       | 12+ | 12+  | 12+  | 62 | }123         | 16 (Apr. 10-28) |
| 2002 Sept. 5 – Dec. 4  | 11*             | 13        | 13  | 13   | 13   | 63 | }125         | 14 (Dec. 7-21)  |
| 2003 Jan. 6 - Apr. 8  * Thanksgiving-M. Oct. 14  * Remembrance Day-M. Nov. 11  + Midterm break-Feb. 17 – 23  # Good Friday-April 18        | 13+             | 13+       | 12+ | 12+  | 12+  | 62 | ).20         | 17 (Apr. 11-30) |
| 2001 Sept. 6 – Dec. 5  | 11*             | 13        | 13  | 13   | 13   | 63 | }126         | 12 (Dec. 7-20)  |
| 2002 Jan. 3 - Apr. 9  * Thanksgiving-M. Oct. 8  * Remembrance Day-M. Nov. 12 for + Midterm break-Feb. 18 – 24 # Good Friday-Mar. 29        | 13+<br>· S.Nov. | 13+<br>11 | 12+ | 13+  | 12+# | 63 | )120         | 16 (Apr. 12-30) |
| 2000 Sept. 6 - Dec. 6  | 12*             | 13        | 14  | 13   | 12** | 64 | }127         | 11 (Dec 8-20)   |
| 2001 Jan. 3 - Apr. 6  * Thanksgiving-M. Oct. 9  ** Remembrance Day-F. Nov. 10 fo + Midterm break-Feb. 19 - 24 # Good Friday – Apr. 13      | 12+<br>r S.Nov. | 12+<br>11 | 13+ | 13+  | 13+  | 63 | }12 <i>1</i> | 17 (Apr. 10-28) |
| 1999 Sept. 8 - Dec. 6  | 12*             | 12        | 13  | 12** | 13   | 62 |              | 12 (Dec. 9-22)  |
| 2000 Jan. 5 - April 7  * Thanksgiving-M. Oct. 11  ** Remembrance Day-Th Nov. 11  + Midterm break-Feb. 21 - 26  # Good Friday – Apr. 21     | 12+             | 12+       | 13+ | 13+  | 13+  | 63 | }125         | 17 (Apr. 11-29) |

# PROPOSAL FOR A NEW INTERDISCIPLINARY MINOR IN DIGITAL CULTURE & NEW MEDIA

# BACHELOR OF ARTS & SCIENCE (4-year and 4-year Honours)

Working Committee:
Allison Muri (English), Susan Shantz (Art & Art History)
Terry Wotherspoon (Sociology), Frank Bulk (eMAP)

| 1. | PROPOSAL IDENTIFICATION   | 4         |
|----|---|-----------|
| 2. | TYPE OF CHANGE  | 4         |
| 3. | RATIONALE   | 4         |
|    | Objectives of the Proposed Minor in Digital Culture & New Media   | 5         |
|    | Alignment of the Proposed Minor with College of Arts & Science and University Priorities                          | 6         |
|    | A Unique Undergraduate Program in Western Canada  | 9         |
|    | Student Demand  | 10        |
|    | Table 1: Canadian Undergraduate Programs in Digital Culture and New Media (for full descriptions s Appendix A)    | see<br>11 |
|    | Table 2: American Undergraduate Programs in Digital Culture and New Media (for full descriptions s<br>Appendix B) | see<br>11 |
|    | Relationship of Proposed Minor to Students' Career Aspirations  | 13        |
|    | Table 3: Media Job Search (Saskatchewan)  | 13        |
|    | Figure 1. Media Job Search: The Breakdown of Advertised Jobs by Category in Canada                                | 15        |
|    | Table 4: Workopolis (keyword search "web media")  | 15        |
|    | Table 5: Exemplary Qualifications for Jobs in New Media   | 18        |
|    | Table 6: Graduate Programs in Digital Culture and New Media (for full descriptions see Appendix C)                | 19        |
|    | Relationship of Proposed Minor to Research Intensiveness  | 20        |
| 4. | DESCRIPTION OF PROGRAM  | 22        |
|    | Proposed Program of Study   | 22        |
| 5. | RESOURCES   | 24        |
| 6. | RELATIONSHIPS AND IMPACT OF IMPLEMENTATION  | 25        |
|    |   |           |

| Consultations: People Consulted  Appendices available from Office of the University Secretary: | 25        |
|--|-----------|
| Appendix A   | 26        |
| Undergraduate Program Descriptions: Canada   | 26        |
| Appendix B   | 31        |
| Undergraduate Program Descriptions: United States  | 31        |
| Appendix C   | 42        |
| Graduate Programs in Digital Culture, New Media, or Digital Humanities                         | 42        |
| Appendix D   | 54        |
| New Interdisciplinary Courses Proposed   | 54        |
| INTS 210.3 Digital Communication and Design: Introduction to Methods & A plications            | .p-<br>54 |
| INTS 401.3: Digital Culture and New Media: Capstone Collaborative Design Project               | 61        |
| Appendix E   | 66        |
| University of Saskatchewan Calendar Descriptions   | 66        |
| Appendix F   | 69        |
| Consultations: Memos of Support  | 69        |

# PROPOSAL FOR A NEW INTERDISCIPLINARY MINOR IN DIGITAL CULTURE & NEW MEDIA

## BACHELOR OF ARTS & SCIENCE (4-year and 4-year Honours)

#### 1. PROPOSAL IDENTIFICATION

This is a proposal to create a new interdisciplinary minor in Digital Culture and New Media to be supported by the Interdisciplinary Centre for Culture and Creativity (ICCC).

Field of Specialization: Interdisciplinary

Level of Concentration: Minor Degree College: Arts and Science Home College: Arts and Science

Contact person: Allison Muri, Assistant Professor, Department of English (allison.muri@usask.ca)

Proposed date of implementation: September 2011

#### 2. TYPE OF CHANGE

Addition of a new Field of Specialization at the Minor Level of Concentration.

#### 3. RATIONALE

Digital technologies are deeply embedded in our society and increasingly influence our culture, our literature and art, and our personal and political freedoms. Students will need to develop the technical skills necessary to understand, participate in, critique, and influence the processes of rapid technological change represented by the terms digital culture and new media.

"Digital culture" describes the participatory culture of online dissemination and exchange: the growing availability of inexpensive recording devices and digital editing tools, interactive social software, and "Web 2.0" applications has resulted in a cultural movement where participants are no longer content to be passive consumers but are becoming active—and interactive—creators, collaborators, and publishers.

"New media" describes digital technologies that enable new intersections and convergences of traditional communications media (books, musical instruments, television, film, radio, visual arts, performance, games, etc.). "New media" also includes digital humanities (also called humanities computing), a field of scholarship and research concerned with the intersection of computing and the humanities. The new issues arising from digital publication and communication demand an informed and articulate public engagement: whether these issues concern digital copyright and public access, privacy, exchange of ideas by citizens, scholars and consumers, the public sphere, or education, our students will need to have an education that has prepared them to participate in critical assessment, dialogue, production, research and development, and policy making.

#### Objectives of the Proposed Minor in Digital Culture & New Media

An Engaged University

"Some other universities, but very few in Canada, have begun to think of themselves as engaged universities. We have an opportunity to develop the concept in a way that is uniquely suited to our circumstances and that builds on a comparative advantage. ... In today's Saskatchewan, the many-sided life of the community also includes ... high technology; ... new media; artistic and cultural industries and vocations ... — all of these linked to global developments. Today, an engaged university's goals fundamentally include the fostering of a democratic civil society in which the university's knowledge and graduates are linked into the fulfillment of economic, social, political and cultural needs and aspirations."

— The Second Integrated Plan (2008–2012): Toward an Engaged University<sup>1</sup>

The transformative influences of digitally-mediated communications are widely recognized in a variety of professions that our undergraduates will eventually pursue — whether business, the arts, journalism, education, the government, or academia. The main objective is to educate students in understanding, using, and creating digital tools: to accomplish this we propose combining a selection from existing undergraduate courses that focus on various aspects of the history, theory and practice of new media. This Minor will establish an interdisciplinary education to prepare students to participate in, utilize, critically engage with and assess, and perhaps most importantly, contribute creatively to the new global information networks, resources, and communications of the digital age. Students completing this minor will develop a foundation for future employment, higher education, or research in these areas. Finally, establishing the minor as a foundation to what we hope will grow into a larger program will enrich and contribute to the emerging concentrations at this university in Digital Humanities and Fine Arts and in Science, Technology, and Society.

<sup>&</sup>lt;sup>1</sup> http://www.usask.ca/ip/inst\_planning/docs/UofS\_Report\_Booklet\_final\_LR.pdf

Required courses for the Minor in Digital Culture and New Media will include a new 200-level INCC (Interdisciplinary Centre for Culture and Creativity) methods course and a new capstone INCC course at the 400-level. Students will also choose from courses in Digital Literature, Visual Arts, Sociology and Computer Science.

The proposed program is intended to establish more intersections between the technical practices of digital technologies and the traditional humanities and fine arts. Students need the tools and the skills not just to upload their files to Flickr or YouTube, but also to assess, research, understand, create, and contribute effectively to the global community online. This program is designed to teach undergraduates to both participate in creating new media, and to reflect on the culture of new creative and distributive practices. New media are profoundly affecting Canada's culture, expression, and economies: they have established new practices of recording, accessing, and recovering information, and they have resulted in new cultural objects — texts, databases, interactive software, digital archives and collections, and so on.

# Alignment of the Proposed Minor with College of Arts & Science and University Priorities

Science, Technology, and Society

"Optimizing the engagement of College faculty members in knowledge creation, particularly externally funded, peer reviewed Research Scholarly and Artistic Work (RSAW) activities, is key to the College's mandate to link teaching and research and to provide undergraduate student with meaningful opportunities for experiential research.... The College will actively seek new Chairs in strategic areas of RSAW, i.e. Digital Research.... "

— College of Arts & Science 2007 Integrated Plan<sup>2</sup>

"The University of Saskatchewan has an opportunity to position itself as a national and international leader in the study of science, technology, and society. ...investments in faculty, research chairs, scientific equipment, and facilities will be matched by additional investments in areas that draw the humanities, social sciences, fine arts, and professional schools into a greater engagement with the questions of science, technology, and society. ...One thing is certain: the University must strive to make this broad, multidisciplinary, field of study a hallmark of the institution in both academic and research programs."

— First Integrated Plan (2003–2007): A Framework for Action<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> https://claws.usask.ca/astab/docs/IP/CollegeOfArtsAndScience\_IntegratedPlan-CollegeSubmission.pdf

<sup>&</sup>lt;sup>3</sup> http://www.usask.ca/ip/inst\_planning/docs/Integrated\_Plan\_May2004.pdf

A minor in Digital Culture and New Media will not only align with but also lend impetus to and strengthen other important college, university, and federal priorities for both research and teaching:

#### 1. The fit with College initiatives:

- a) In 2009–10, the Department of English and College of Arts & Science sponsored an initiative for a **Research Chair in Digital Textuality**. The appointment of Dr. Peter Robinson, D.Phil (Oxon), beginning in Fall 2010, will benefit graduate programs and research in English and CMRS, and provide impetus and sustainability to the Digital Research Centre (DRC) infrastructure. Undergraduate students, as previously mentioned, will benefit from the close relationship of the Minor's focus with current research initiatives, and from the ongoing activities of the DRC.
- b) The Clarion Project, the development campaign for a new Fine and Performing Arts Centre with connections to the Interdisciplinary Centre for Culture and Creativity (ICCC) and other interdisciplinary research and teaching opportunities with many departments and Colleges, currently has a great deal of momentum and interest across the campus. With its stated goals to strengthen community relationships, serve as an impetus for increased interdisciplinary partnerships, and create innovative teaching, learning, and performance facilities, including new space for the DRC, the Clarion Project has tremendous synergy with, and benefit from, a new Minor in Digital Culture and New Media.

#### 2. The fit with the university's Strategic Research Plan (SRP)

While the SRP specifically speaks to research initiatives at the University of Saskatchewan, research and teaching unquestionably go hand in hand. Introducing students to the concepts of Digital Culture and New Media at the undergraduate level will feed into our graduate programs and research. The February 2006 SRP<sup>4</sup> identified seven broad research themes as "areas of research strength and priority at the University of Saskatchewan." Of the seven emerging areas of pre-eminence identified as having strategic importance to the university two are pertinent here:

#### a) Culture and Society:

Four themes are identified, two of which resonate with the goals of the minor: **Research in Society in a Global Context** includes inter-cultural discourse, literature and language analysis, race, gender and sexuality. **Research in Humanities and Foundations of Knowledge** encompasses early societies, classical, medieval and renaissance studies, the history of science, human reasoning, and indigenous humanities.

#### b) Frontiers of Technology:

Three themes are identified, two of which resonate with the goals of the minor: The **Social Contexts for Technology** focuses on issues such as the organization of work, diffusion of innovation,

<sup>&</sup>lt;sup>4</sup> http://www.usask.ca/crc/policy/SRP\_summary\_Feb\_2006.pdf

artistic expression, durability of social bonds, distribution of property rights and the new rural economy. Research in advanced learning technologies using techniques from computer science, human-computer interaction, artificial intelligence and software-agent technologies study these effects on humans. The research thrust of **Information and Communication Technologies** has had farreaching impact and changed profoundly the very nature of many disciplines. These include computer modeling, imaging, geographic information systems, communications and software technology, data mining technology, networks, and digital techniques. Key areas in this research thrust include communications and networks, computer architecture and system engineering, and next-generation groupware.

Regarding the first initiative, the global contexts of culture and society are paramount in any scholar-ship and pedagogy of digital communications (whether publishing, distribution, collaborative editing and sharing of research tools and resources, or global research networks that involved distributed computing). In terms of "Foundations of Knowledge," this initiative would also enhance the Classical Medieval and Renaissance Studies (CMRS) goals to develop a graduate program wherein the Digital Humanities would be a significant dimension. In terms of the second initiative, the minor speaks directly to educating students about the social contexts for technology as itemized above.

#### 3. The fit with federal goals for education and training:

A key goal of the federal science and technology (S&T) strategy—Mobilizing Science and Technology to Canada's Advantage<sup>5</sup> (2007) is to "create a Knowledge Advantage" that traverses diverse disciplines and entrepreneurial endeavors: "information and communications technologies (ICTs)... underpin many of the most transformative advances in science and technology. ICTs have brought about fundamental reforms in such areas as commerce, education, and health care." Accordingly, "Canada's federal government will focus strategically on research in areas that are in the national interest from a social and economic perspective: We will focus more of our energies and resources in the areas identified below." These priority areas include "information and communications technologies." The report emphasizes that Canada's three granting councils, CIHR, NSERC and, notably, SSHRC, with other partners such as NRC and CFI, "will work together to build a critical mass of expertise in these priority areas. They will support multidisciplinary research that brings together expertise from diverse fields, including natural sciences and engineering, social sciences and humanities, and health sciences." What the federal S&T strategy suggests is that these priorities are not limited to sciences and engineering: the humanities and social sciences have contributions to make and have the potential to innovate in this area. Digital culture and new media studies clearly are congruous with federal priorities.

<sup>&</sup>lt;sup>5</sup> http://www.ic.gc.ca/eic/site/ic1.nsf/vwapi/SandTstrategv.pdf/\$file/SandTstrategv.pdf

#### 4. The fit with Tri-Council funding initiatives:

Under SSHRC's new program architecture, Digital Media has been identified as a Priority Area. According to SSHRC:

The Digital Media priority area aims to build knowledge and understanding on how digital media are transforming cultural expression, society and the economy, now and into the future. Its goal is also to enable researchers to benefit fully from the opportunities brought about by rapidly evolving technologies through direct involvement with digital media.

Digital media are transforming how people create, share and consume creative content and information. The creation and use of a vast range of digitized content (text, graphics and images, audio, video) are also changing the nature and methods of research inquiry, and pushing the boundaries of creativity, in many areas of the humanities and social sciences. Digital media are allowing researchers to examine new questions and gain new insights on individuals and their societies, and presenting exciting opportunities for scholarship.<sup>6</sup>

SSHRC has also added Outreach and Tools Grants to its program. These grants will support research that will include "development of digital tools to support more effective knowledge mobilization" and "infrastructure initiatives not eligible for funding from the Canada Foundation for Innovation (e.g., new media tools, social networking)."<sup>7</sup>

#### A Unique Undergraduate Program in Western Canada

Currently there are some programs in the areas of Digital Culture and New Media in Canada; however, there are none in Western Canada that offer the proposed combination of generalized technical skills and critical apparatus (see Table 1). Unlike the University of Victoria's emerging Humanities Computing undergraduate program, for example, the proposed minor will appeal to a broad base of students who may not choose humanities computing as a discipline but who will find positions requiring skills and creative input in a variety of digital communications mechanisms.

igital\_research-recherche\_numerique-eng.aspx

http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/priority\_areas-domaines\_prioritaires/d

<sup>&</sup>lt;sup>7</sup> http://www.sshrc-crsh.gc.ca/news\_room-salle\_de\_presse/Program\_Architecture\_Consultation\_e.pdf

#### **Student Demand**

We currently have no data on student demand for this particular minor at the University of Saskatchewan. However, the increase in the number of programs of this nature throughout North America suggests a response to a growing need. An increasing number of universities throughout Canada (see Table 1) and especially in the US (see Table 2), are responding to the transformations in communications by offering undergraduate degrees, minors, and certificates in new media applications and critique. The undergraduate program in Comparative Media Studies is MIT's largest major in the humanities, another indication of the potential for student demand in this new area.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> http://cms.mit.edu/academics/

# TABLE 1: CANADIAN UNDERGRADUATE PROGRAMS IN DIGITAL CULTURE AND NEW MEDIA (FOR FULL DESCRIPTIONS SEE <u>APPENDIX A</u>)

| UNIVERSITY             | PROGRAM                                     | INFRASTRUCTURE                      | ACCREDITATION            |
|------------------------|---|-------------------------------------|--------------------------|
| Brock University       | Interactive Arts and Science (IASC) program | Centre for Digital Humanities       | BA                       |
| McMaster University    | Communication Studies and Multimedia        |                                     | BA                       |
| Nipissing University   | Digital Humanities                          |                                     | Certificate              |
| University of Victoria | Technology and Society                      |                                     | Minor                    |
| University of Victoria | Digital Humanities (emerging program)       | Humanities Computing & Media Centre | undergraduate<br>courses |

BA (Major or Hon-

ours Specialization)

BA or Certificate

# TABLE 2: AMERICAN UNDERGRADUATE PROGRAMS IN DIGITAL CULTURE AND NEW MEDIA (FOR FULL DESCRIPTIONS SEE <u>APPENDIX B</u>)

Media, Information &

Technoculture (MIT)

Digital Media

| UNIVERSITY                  | PROGRAM   | INFRASTRUCTURE  | ACCREDITATION |
|-----------------------------|---|---|---------------|
| Brigham Young<br>University | Computers and the Humanities Program (CHum Program) | Humanities Technology<br>and Research Support Cen-<br>ter | Minor         |
| Brigham Young<br>University | Linguistics Computing                               |   | Minor         |
| Duke University             | Information Science + Information Studies (ISIS)    |   | Certificate   |

Proposed Minor in Digital Culture & New Media

University of West-

ern Ontario Faculty

of Information

York University

**Studies** 

| UNIVERSITY                                      | PROGRAM   | INFRASTRUCTURE  | ACCREDITATION                 |
|---|---|---|-------------------------------|
| Michigan State<br>University                    | Digital Humanities                                  |   | Specialization                |
| MIT   | Comparative Media Studies                           | Hyperstudio, laboratory for digital humanities                              | Major, Double Major, or Minor |
| Rensselaer Polytechnic Institute                | Electronic Media, Arts, and<br>Communication (EMAC) |   | BS                            |
| Stanford University                             | Digital Humanities                                  | Humanities Lab  | Module                        |
| Tulane University School of Liberal Arts        | Digital Media Production                            |   | Major                         |
| University of<br>California, Santa<br>Barbara   | Literature and Culture of Information (LCI)         | Transcriptions: A Digital Humanities Project on the Cultures of Information | Specialization                |
| University of<br>Central Florida                | Digital Media Program                               | Department of Digital Media   |                               |
| University of<br>Denver                         | Digital Media Studies                               |   | BA                            |
| University of<br>Illinois, Urbana-<br>Champaign | Informatics   | Illinois Informatics Institute  | Minor                         |
| University of<br>Maine                          | New Media   |   | Major                         |
| University of<br>Maryland, Col-<br>lege Park    | Digital Cultures & Creativity                       | Maryland Institute for<br>Technology in the Hu-<br>manities (MITH)          | Certificate                   |
| University of<br>Virginia                       | Media Studies                                       | Institute for Advanced Technology in the Humanities (IATH)                  | Major or Minor                |

| UNIVERSITY                     | PROGRAM                                  | INFRASTRUCTURE  | ACCREDITATION |
|--------------------------------|--|---|---------------|
| University of<br>Virginia      | Digital Innovation and<br>Methodologies  | Institute for Advanced Technology in the Humanities (IATH)      | Minor         |
| University of<br>Washington    | Digital Arts and Experi-<br>mental Media | DXARTS — Center for<br>Digital Arts and Experi-<br>mental Media | BFA           |
| Washington<br>State University | Digital Technology And<br>Culture (DTC)  |   | BA or Minor   |

#### Relationship of Proposed Minor to Students' Career Aspirations

#### **Job Opportunities**

According to the PricewaterhouseCoopers "Canadian Interactive Industry Profile 2006," he size of the interactive media industry in Canada is significant: "There are an estimated 3,200 firms engaged in interactive media across Canada that generate total gross revenue of \$7.07 billion to \$7.43 billion. The overall estimated total revenue from interactive media for all firms is between \$4.93 billion and \$5.01 billion. Including full time staff, part time staff and subcontractors, there are estimated to be between 50,300 and 52,100 people working in interactive media across Canada."

Media Job Search Canada, <sup>10</sup> specializing in media related jobs at companies across Canada, lists a number of jobs in this new area. See, for example, the jobs posted for Saskatchewan from June to August (Table 3).

TABLE 3: MEDIA JOB SEARCH (SASKATCHEWAN)

| TITLE   | COMPANY                | LOCATION   | POST DATE    |
|---|------------------------|------------|--------------|
| Interactive Writer/Producer                               | The Regina Leader-Post | Regina, SK | Aug 11, 2010 |
| Producer - English Television -<br>REG00200 - Position #1 | CBC Radio-Canada       | Regina, SK | Aug 10, 2010 |

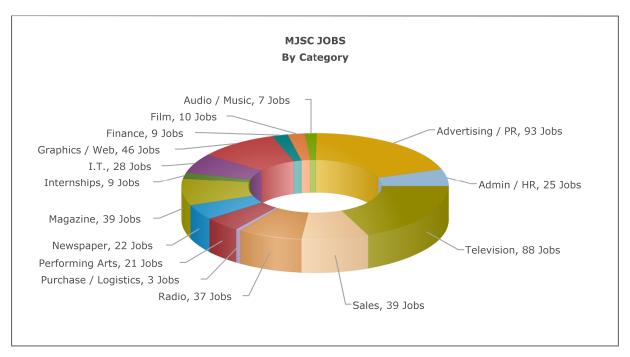
<sup>&</sup>lt;sup>9</sup> http://www.ciaic.ca/files/CIIP2006-EN.pdf

<sup>&</sup>lt;sup>10</sup> http://www.mediajobsearchcanada.com

| TITLE   | COMPANY                            | LOCATION           | POST DATE    |
|---|------------------------------------|--------------------|--------------|
| Producer - English Television, Temporary - REG00198 - Position #2 | CBC Radio-Canada                   | Regina, SK         | Aug 10, 2010 |
| Weather Anchor / Reporter   | Global Regina                      | Regina, SK         | Aug 10, 2010 |
| INTERNSHIPS: Vancouver, Edmonton, Calgary, Ottawa, Halifax        | Metro News Canada                  | Across Canada      | Aug 9, 2010  |
| Producer - English Television - Full-<br>Time - REG00200          | CBC RADIO-CANADA                   | Regina, SK         | Aug 9, 2010  |
| Producer - English Television, Temporary - REG00198               | CBC RADIO-CANADA                   | Regina, SK         | Aug 9, 2010  |
| Music Director / Afternoon Drive<br>Host.                         | Astral Radio - Big Dog<br>92.7 FM  | Regina, SK         | Aug 6, 2010  |
| Video Intern Wanted!  | Peace Point Entertainment<br>Group | Across Canada      | Aug 4, 2010  |
| Reporter French Services, SK -<br>REG00199                        | CBC Radio-Canada                   | Regina, SK         | Aug 4, 2010  |
| Freelance Writers (multiple) - Telecommute,                       | Suite101                           | Across Canada      | Aug 3, 2010  |
| Fresh Writing Talent Wanted - Tele-<br>commute, International     | Demand Studios                     | Across Canada      | Jul 30, 2010 |
| Field Directors and Shooter/<br>Directors                         | Paperny Films                      | Across Canada      | Jul 27, 2010 |
| Senior Story Producer   | Paperny Films                      | Across Canada      | Jul 27, 2010 |
| Theatrical Artist in Residence                                    | TOWN OF GRAVEL-<br>BOURG           | Gravelbourg,<br>SK | Jul 27, 2010 |
| National Retail Sales   | The Walrus magazine                | Across Canada      | Jul 26, 2010 |
| Account Director - Toronto or Mont-<br>real                       | SPAFAX                             | Across Canada      | Jul 6, 2010  |
| Audiovisual Technician  | bb Blanc                           | Across Canada      | Jun 29, 2010 |

| TITLE                       | COMPANY        | LOCATION      | POST DATE    |
|-----------------------------|----------------|---------------|--------------|
| Independent Writers Wanted! | DEMAND STUDIOS | Across Canada | Jun 22, 2010 |

FIGURE 1. MEDIA JOB SEARCH:
THE BREAKDOWN OF ADVERTISED JOBS BY CATEGORY IN CANADA



A search for the keywords "web media" on Workopolis.com results in numerous job postings including web development and web communications, user interface/front-end developers, media relations, and social media marketers (see Table 4). The qualifications for two exemplary positions advertised on Workopolis.com demonstrate the benefits to students of combining a liberal arts education with technical skills and media awareness (see Table 5).

TABLE 4: WORKOPOLIS (KEYWORD SEARCH "WEB MEDIA')

| TITLE                                      | COMPANY   LOCATION   | POST DATE   |
|--|--|-------------|
| Local Writers Wanted (part time freelance) | Examiner.com / Clarity Digital Media   Calgary, AB; Vancouver, BC; Montreal, QC; Toronto, ON | 09-Aug-2010 |
| User Experience Designer/<br>Developer     | AVID LIFE MEDIA   Toronto, ON  | 14-Aug-2010 |

| TITLE   | COMPANY   LOCATION  | POST DATE   |
|---|---|-------------|
| Web Developer - CTV Digital<br>Media                                | CTVGLOBEMEDIA INC   Toronto, ON   | 11-Aug-2010 |
| Web & Variable Data (Cross<br>Media) Application Support<br>Analyst | WEST CANADIAN   Calgary, AB   | 12-Aug-2010 |
| Media Relations Specialist  | Canadian Union of Public Employees   Ottawa,<br>ON                      | 10-Aug-2010 |
| Social Media Marketer   | GROOM & ASSOCIÉS, POINTE-<br>CLAIRE   Montreal, QC                      | 09-Aug-2010 |
| Online Media Consultant   | WORKOPOLIS   Montreal, QC   | 09-Aug-2010 |
| Web Coordinator   | RIGHT TO PLAY, INTERNATIONAL   Toronto, ON                              | 06-Aug-2010 |
| Social Media Marketing Coordinator                                  | Flyerland.ca   Ajax, ON   | 03-Aug-2010 |
| Manager, Media Relations  | Afexa Life Sciences Inc.   Edmonton, AB                                 | 03-Aug-2010 |
| Information Architect, CTV Digital Media (CTV)                      | CTVGLOBEMEDIA INC   Toronto, ON   | 12-Aug-2010 |
| Senior Web Designer   | ACADEMICA GROUP INC.   Toronto, ON                                      | 10-Aug-2010 |
| Senior Web Developer  | SAPPHIRE CANADA   Toronto, ON   | 10-Aug-2010 |
| Front End Web Developers  | SAPPHIRE CANADA   Toronto, ON   | 10-Aug-2010 |
| Web and Facebook Application Developer                              | IREEL   Laval, QC; Montreal-Ouest, QC;<br>Montreal-Est, QC; LaSalle, QC | 10-Aug-2010 |
| Web and Facebook Application Developer                              | GROOM & ASSOCIÉS, POINTE-<br>CLAIRE   Montreal, QC                      | 09-Aug-2010 |
| Media Specialist  | ROGERS   Toronto, ON  | 19-Jul-2010 |
| Web Communications Specialist                                       | FEDERATION OF CANADIAN MUNICIPALITIES (FCM)   Ottawa, ON                | 28-Jul-2010 |

| TITLE  | COMPANY   LOCATION                                       | POST DATE   |
|--|--|-------------|
| WEB REPORTER/WRITER                            | CTVGLOBEMEDIA INC   Montreal, QC                         | 28-Jul-2010 |
| Senior Web Designer/Senior<br>Web Developer    | ONTARIO INSTITUTE FOR CANCER RESEAR-<br>CH   Toronto, ON | 23-Jul-2010 |
| Web Producer (Bilingual<br>English/French)     | MICHAEL PAGE INTERNATIONAL   Montreal, QC                | 27-Jul-2010 |
| Web Developer                                  | ISG SEARCH   North York, ON                              | 20-Jul-2010 |
| Web Designer, Marketing                        | MASTERFILE CORPORATION   Toronto, ON                     | 22-Jul-2010 |
| Intermediate Web Developer                     | TSAVO MEDIA   Guelph, ON                                 | 22-Jul-2010 |
| Web Content Coordinator - The Shopping Channel | ROGERS   Mississauga, ON                                 | 28-Jul-2010 |
| Web Producer (Bilingual<br>English/French)     | MICHAEL PAGE INTERNATIONAL   Ottawa, ON                  | 23-Jul-2010 |
| Social Media Specialist                        | SMART Technologies Inc.   Calgary, AB                    | 15-Jul-2010 |
| Junior Web Developer (contract)                | PEARSON CANADA   Toronto, ON                             | 15-Jul-2010 |
| Senior Front-End Web Developers                | SAPPHIRE CANADA   Toronto, ON                            | 13-Jul-2010 |
| Web Producer (Bilingual,<br>French/English)    | MICHAEL PAGE INTERNATIONAL   Toronto, ON                 | 08-Jul-2010 |
| Web Development Manager                        | SAPPHIRE CANADA   Toronto, ON                            | 24-Jun-2010 |
| Sales Executive - Web 2.0 solutions            | MARTYN BASSETT ASSOCIATES INC   Toronto, ON              | 24-Mar-2010 |
| Exceptional Web User Interface<br>Developer    | PEOPLESOURCE STAFFING SOLUTIONS INC.   Waterloo, ON      | 15-Jun-2009 |

#### TABLE 5: EXEMPLARY QUALIFICATIONS FOR JOBS IN NEW MEDIA

#### SOCIAL MEDIA MARKETER

#### USER EXPERIENCE DESIGNER/DEVELOPER

- 1 to 3 years of hands-on social marketing experience
- Solid understanding of social media marketing, online marketing and integrated marketing communication techniques and strategies
- Previous experience working on social media marketing programs as well as executing word-of-mouth campaigns (including blogger/influencer outreach programs) is an asset
- Must have active accounts across key social media networks including, but not limited to, Facebook, Twitter, MySpace, etc.
- Outstanding attention to detail with the ability to deal with uncertainty
- Strong English communications skills, written and verbal
- Ability to contribute individually, and lead, manage or participate in cross-functional projects
- Willingness and ability to experiment and be creative
- Ability to multitask and work well in a team environment
- Possess a university or CEGEP diploma

- 3+ years experience in web design
- College or University Degree
- Strong visual design skills with demonstrated attention to detail
- Demonstrated ability to design simple and engaging user interfaces
- Strong creative and technical skills including color theory, typography, layout, user interface design
- Well-versed in the quirks of Firefox, IE6, IE7 and Safari, testing and assuring cross-browser and cross-platform quality and adherence
- Expert HTML/CSS coding skills
- Strong command of web standards, CSS-based design, cross-browser compatibility
- Up to date with latest UI elements and technologies
- Basic Flash skills
- Proficiency in Adobe suite of tools
- Worked on various Web 2.0 and or online applications
- Strong verbal and written English communication skills
- Ability to handle a project from conception to completion.

#### **Graduate Studies**

A growing number of universities in Canada and the US are offering graduate programs in Digital Humanities and New Media Studies (see Table 6), and notably the successful MA program in Humanities Computing in our neighboring province at the University of Alberta. If our students choose to go on to higher academic pursuits, they will have a basic understanding of the issues, and some foundational technical skills upon which to build.

### TABLE 6: GRADUATE PROGRAMS IN DIGITAL CULTURE AND NEW MEDIA (FOR FULL DESCRIPTIONS SEE $\underline{\mathsf{APPENDIX}\ \mathsf{C}}$ )

| UNIVERSITY   | PROGRAM   |
|--|---|
| Berkeley Graduate School of Journalism   | New Media Program   |
| Concordia University   | Graduate Certificate in Digital Technologies in Design Art Practice |
| Georgia Tech   | Digital Media PhD   |
| IT University of Copenhagen  | MA or PhD   |
| King's College London  | PhD in Digital Humanities   |
| McMaster University  | Master of Arts in Communication and New Media                       |
| MIT  | Comparative Media Studies Master's of Science (SM)                  |
| Nui Maynooth   | MA in Digital Humanities  |
| NYU Tisch School of the Arts   | MA or PhD   |
| Simon Fraser University School of Interactive Arts and Technology  | MA, MSc, or PhD   |
| Texas A&M University   | Certificate in Digital Humanities                                   |
| University of Alberta  | MA in Humanities Computing  |
| University of British Columbia, Simon Fraser Institute,<br>Emily Carr School of Art & Design, and British Columbia<br>Institute of Technology — Centre for Digital Media | Masters of Digital Media  |
| University of Central Florida  | PhD in Texts and Technology   |
| University College London Department of Information<br>Studies   | PhD   |
| University of Toronto Faculty of Information Studies   | Master of Information or PhD  |
| University of Virginia Digital Humanities Media Studies  | MA  |

| UNIVERSITY   | PROGRAM                    |  |
|--|----------------------------|--|
| University of Western Ontario Faculty of Information Studies | MA or PhD in Media Studies |  |

#### Relationship of Proposed Minor to Research Intensiveness

Research in the digital humanities, arts, and social sciences is truly beginning to flourish at the University of Saskatchewan. To enhance this developing area of research, it is important to provide opportunities for faculty to teach in their areas of expertise, develop relationships with students in these areas, and recruit graduate students with an introductory knowledge of tools, techniques, and critical theories in these areas. The establishment of the **Electronic Text Research at the U of S (ETRUS)** group is one important initiative by faculty. Additionally, a number of scholars in recent years have established award-winning digital research projects:

- a) **Anthony Harding, English (Emeritus)**: "An Electronic Index to the Notebooks of Samuel Taylor Coleridge": \$124,882 (SSHRC SRG, 2001–8). This project, with Dr. David Miall and Dr. Terry Butler (University of Alberta) as Co-investigators, involved constructing a cumulative and analytical electronic index to the five volumes of *The Notebooks of Samuel Taylor Coleridge*.
- b) Lisa Vargo, English: "Mary Shelley: Woman of Letters": \$50,139 (SSHRC SRG, 2006). Two digital editions were produced with this grant: Mary Shelley's Lives of the Eminent Literary and Scientific Men: An Electronic Edition and Percy Shelley's Posthumous Poems. The web editions make little-known but significant literary and scholarly achievements accessible to readers as full-colour facsimile and searchable text.
- c) **Jennifer Poudrier and Roanne Thomas-Maclean, Sociology**: "Visualizing Breast Cancer: Exploring Aboriginal Women's Experiences": \$43,471 (Canadian Breast Cancer Research Alliance, 2005). This project involved providing Aboriginal women with digital cameras to allow them to take pictures of what breast cancer meant to them.
- d) **Jennifer Crane, Art & Art History**: Lens-based Digital Research Lab: \$24,800 (CFI, 2007). This project uses still and video digital cameras and film scanners to develop and display new storytelling techniques that will transform the way people think about the role of technology in their lives.
- e) **Geoff Cunfer, History**: Historical Geographic Information Systems Laboratory: \$51,514 toward a \$128,796 project to create a Historical GIS Lab at the College (CFI, 2007). This laboratory supports

research on human-environment interaction, on how people have altered landscapes, and how they have responded to changing climates in the past 100 years.

- f) Susan Shantz, Art & Art History: \$17,000 to reproduce functional, decorative, three-dimensional objects from museum collections. She is collaborating with the U of S College of Engineering on this project. (Saskatchewan Arts Board, 2008).
- g) **Brent Nelson, English**: "The Culture of Curiosity in England and Scotland 1580–1700": \$95,416 (SSHRC SRG, 2009). This project comprises a Web-delivered virtual museum of early modern collections of rarities and curiosities in England and Scotland ("The Digital Ark"); and a series of essays taking a literary approach to examine the cultural meaning and significance of curiosity, especially as expressed in collections of rarities and curiosities in early modern England.
- h) **Allison Muri, English**: Computing & Media Studies Research Lab \$40,610 (CFI, 2009) + \$40,610 (Saskatchewan Innovation & Science Fund, 2009) toward a \$101,600 project to establish a Computing and Media Studies Research Lab in the DRC. This lab combines computational and traditional methods for researching the early modern history of media and print culture.
- i) Allison Muri, English: "The Grub Street Project: Topographies of Literature and Communications in 18th-Century London": \$62,168 (SSHRC SRG, 2010). This project studies how digital mapping can create new ways to visualize English literary history and communications in 18th-century London. In creating an electronic edition and archive of historical London, this work will enhance our understanding of both the history and the future of the "book" and interface design.

These projects, and other digital projects throughout the college, have used undergraduate and graduate students as research assistants (for example "The Ege Project" headed by Dr. Peter Stoicheff has employed and trained numerous graduate and undergraduate students over the past decade).

<sup>11</sup> http://www.usask.ca/research/communications/explore/vol2no1/scattered-leaves.php

#### 4. DESCRIPTION OF PROGRAM

Innovation in Programs

The University of Saskatchewan will be known for innovative, quality programs that connect learning and discovery in distinctive, often interdisciplinary, ways. Passion, excitement, and intellectual engagement should be at the heart of program innovation and renewal. We need to resist the temptation to add programs that are convenient, and make sure we focus real energy, attention, and resources on areas that reflect the greatest interest and dedication on the part of learners and teachers. We will avoid the temptation to add to the total number of courses offered and focus instead on renewal of courses and on increasing the flexibility with which programs are assembled to match student interests.

— The Second Integrated Plan (2008–2012): Toward an Engaged University

This minor follows the general requirements and standards of BA programs in the College of Arts and Science. The required courses are proposed as new Interdisciplinary Studies courses in the College of Arts and Science (see <a href="Appendix D">Appendix D</a> for full descriptions); the remaining credits are already existing courses in the college (see <a href="Appendix E">Appendix E</a> for calendar descriptions).

#### **Proposed Program of Study**

The transformative influences of digital communications are widely recognized in a variety of professions that students will eventually pursue — whether business, publishing, the arts, journalism, education, the government, or academia. The goal of this minor is to educate students in the history, theory and practice of new media. Courses in English, Sociology, Art and Art History, and Computer Science will help prepare students to participate in, utilize, critically engage with and assess, and perhaps most importantly, contribute creatively to the new global information networks, resources, and communications of the digital age.

Students who complete the Minor in Digital Culture and New Media will develop a foundation for future employment, higher education, or research in these areas. This curriculum will provide a foundation for jobs as Web Designer, Web Reporter, Web Producer, Web Communications Specialist, Media Specialist, Social Media Marketer, User Interface Designer/Developer, New Media Arts, and so on. It will also provide a good foundation for graduate studies in Digital Humanities, in Information Studies, English, Sociology, and Art and Art History.

#### A. Required courses

1. INCC 210.3 Digital Communication and Design: Introduction to Methods & Applications Modules include Photoshop; Film & Film editing; Web 2.0 apps; html and basic website management. This course is primarily lab-based, with graded assignments for each module. There is no final exam as students will be marked on this portfolio.

#### 2. INCC 401.3: Digital Culture and New Media: Capstone Collaborative Design Project

A capstone design course in which advanced principles of history, theory, and design are applied to a suitable interdisciplinary project in new media creation and commentary. The course, which builds upon the foundations established throughout the course of study, focuses on approaches to be taken in defining project objectives and scope, researching suitable contexts, and designing and implementing a new media project. Design philosophy and methods are discussed and explored in the context of the particular assignment. The course requires that the students work in groups to achieve a unified production, which may include a formal essay in addition to blogs, digital films, art, and/or soundscapes published online. Group interaction and performance is monitored throughout. When possible, guest lectures from various industrial and other representatives will be provided to enhance the student's design experience.

### **B. 18 credit units from from at least TWO of the following four disciplines:** (not more than 6 cu from the student's Major):

1. Art (please note that not all of these are offered every year)

ART 136.3 Extended Media I Foundation

ART 236.3 Extended Media II A

ART 237.3 Extended Media II B

ARTH 250.3 Introduction to Visual Culture

ART 336.6 Digital Imagery

ART 338.3 Extended Media III A

ART 339.3 Extended Media III B

ART 438.3 Extended Media IV A

ART 439.3 Extended Media IV B

#### 2. Computer Science

CMPT 105.3 Introduction to Computing and Interactive Systems Design CMPT 106.3 Design and Construction of Games and Interactive Systems

#### 3. English

ENG 204.6 History and Future of the Book

ENG 307.3 Digital Literature and New Media

ENG 404.3 Topics in 16th Century Literature in English

(ONLY when focus is on digital editing; permission of Program Coordinator required) ENG 406.3 Topics in 17th Century Literature in English (ONLY when focus is on digital editing; permission of Program Coordinator required)

#### 4. Sociology

SOC 244.3 Sociology of Mass Media in Canada SOC 246.3 Ideology and Mass Communication SOC 260.3 Social Change and Global Solidarity SOC 360.3 Globalization and Social Justice

#### C. Optional Complementary Courses

DRAM 340.3 Play Directing
DRAM 440.3 Advanced Direction
ENG 288.3 Introduction to Film
PHIL 236.3 Ethics and Technology
WGST 355.3 The Celluloid Cyborg: A Course in Technotheory and Cyberpunk

#### 5. RESOURCES

The resources required for labs and projects in the Methods course will be accommodated by the Digital Resource Centre (DRC), Media Access and Production (eMAP), and university Computer Labs. The Minor draws on existing courses offered by the College of Arts & Science and St. Thomas More College. Two new half-courses in Interdisciplinary Studies are being proposed (Methods and Capstone). The textbook for the Methods course will be training videos through Lynda.com, which will provide access to five modules for \$35 per student (calculation based on 20 students for one term).

Two new classes are proposed for this minor: INCC 210.3 Digital Communication and Design: Introduction to Methods & Applications and INCC 401.3: Digital Culture and New Media: Capstone Collaborative Design Project. Discussions are ongoing with eMAP regarding that division's delivery of modules for the Methods course. eMap proposes to develop the course through existing TEL funding, and offer lab instruction for the first year as in-kind contribution under the division's mandate as an academic support unit. The capstone course will be taught by one or more instructors in one of the four disciplines that make up the minor. David Parkinson, Vice-Dean, Humanities and Fine Arts, has committed to work towards ensuring that space, equipment, and assistance is available; we will also apply for funding from the Provost's Project Grant for Innovations in Teaching and Learning.

The administration and delivery of this minor will be through the Interdisciplinary Centre for Culture & Creativity (ICCC).

#### 6. RELATIONSHIPS AND IMPACT OF IMPLEMENTATION

We envision 25 in the first year, growing to 30–40 students taking the new program per year. We do not anticipate that the new minor will have any negative impact on other departments or programs; rather, we hope to establish new synergies and interest in existing programs and courses.

#### Consultations: People Consulted

Please see <u>Appendix F</u> for letters of consultation.

- David Parkinson, Vice Dean Humanities and Fine Arts, and Digital Research Centre (DRC)
- Susan Shantz, Head, Department of Art & Art History
- Doug Thorpe, Head, Department of English
- Gregory Loewen, Chair, Department of Sociology, St. Thomas More College
- Terry Wotherspoon, Head, Department of Sociology
- Eric Neufeld, Head, Department of Computer Science
- Carl Gutwin, Computer Science (Bachelor of Arts and Science Four-year (B.A.Sc. Four-year) in Interactive Systems Design)
- Elizabeth Lulchak, Acting Director, Media Access & Production (eMAP)
- Ron Cooley, Professor, English
- Darrell McLaughlin, Professor, Sociology, STM
- Wendy Wilson, Instructor, Sociology, STM
- Jim Guedo, Head, Department of Drama
- William Bartley, Professor, English
- Diana Relke, Professor, WGST
- Sarah Hoffman, Head, Department of Philosophy
- Gary Brunet, Associate Director of Information Technologies, College of Arts & Science

#### **New Courses:**

### INCC 210.3 Digital Communication and Design: Introduction to Methods & Applications

This is a hands-on course focusing on the techniques and methods of digital communications and multimedia

design. The modules for this methods course include Photoshop; Film & Film editing; Web 2.0 apps; html and basic website design. The course is primarily lab-based, with graded assignments for each module. The course is introductory, and provides a foundation on which to build further technical skills.

There is no final exam as students will be marked on their labs and portfolio of work. The portfolio will be a CD or website that approximates what students would provide when applying for employment, and will be marked on the basis of organization of materials (user-interface design), language (appropriateness and clarity), and quality of technical production.

The "textbook" for the course will be training videos purchased by students through Lynda.com, which will provide access to five modules for \$35 per student (calculation based on 20 students for one term).

#### INCC 401.3: Digital Culture and New Media: Capstone Collaborative Design Project

A capstone design course in which advanced principles of history, theory, and design are applied to a suitable interdisciplinary project in new media creation and commentary. The course, which builds upon the foundations established throughout the course of study, focuses on approaches to be taken in defining

project objectives and scope, researching suitable contexts, and designing and implementing a new media

project. Design philosophy and methods are discussed and explored in the context of the particular assignment.

The course requires that the students work in groups to achieve a unified production, which may include a formal essay in addition to blogs, digital films, art, and/or soundscapes published online. Group interaction and performance is monitored throughout. When possible, guest lectures from various industrial and other representatives will be provided to enhance the student's design experience.

## Report Form for Program Termination University of Saskatchewan

Program(s) to be deleted: Co-operative Education Program in Regional and Urban Planning

Effective date of termination: May 2011

1. List reasons for termination and describe the background leading to this decision.

The Co-operative Education Program option has not been offered for several years, and will not be offered again in the foreseeable future. Co-op programs require a greater investment of financial and human resources than traditional programs, which have been and will continue to be unavailable. To avoid misleading students, the program should be deleted and removed from the Calendar.

The Regional and Urban Planning program will continue to be offered in the traditional, course-based format.

#### 2. Technical information.

2.1 Courses offered in the program and faculty resources required for these courses.

No courses are offered which are unique to this program.

2.2 Other resources (staff, technology, physical resources, etc) used for this program.

None.

2.3 Courses to be deleted, if any.

None.

2.4 Number of students presently enrolled.

No students are currently enrolled in this program option.

2.5 Number of students enrolled and graduated over the last five years.

Unknown, and presumably none.

#### 3. Impact of the termination.

#### Internal

3.1 What if any impact will this termination have on undergraduate and graduate students? How will they be advised to complete their programs?

No impact.

3.2 What impact will this termination have on faculty and teaching assignments?

None.

3.3 Will this termination affect other programs, departments or colleges?

No.

3.4 If courses are also to be deleted, will these deletions affect any other programs?

N/A

3.5 Is it likely, or appropriate, that another department or college will develop a program to replace this one?

No.

3.6 Is it likely, or appropriate, that another department or college will develop courses to replace the ones deleted?

N/A

3.7 Describe any impact on research projects.

None.

3.8 Will this deletion affect resource areas such as library resources, physical facilities, and information technology?

No.

3.9 Describe the budgetary implications of this deletion.

Resources for this program are already unavailable. No further changes are anticipated.

#### External

3.10 Describe any external impact (e.g. university reputation, accreditation, other institutions, high schools, community organizations, professional bodies).

Deleting the program from the Calendar will provide prospective students with an accurate picture of the program options available. It bears mentioning that the Provincial Minister of Municipal Affairs, when he visited the Regional and Urban Planning Program in 2008, felt that we should try to develop a co-operative education program. The Association of Professional Community Planners of Saskatchewan has indicated similarly, much as some other Canadian planning programs do (e.g., University of Manitoba, University of Waterloo). Nevertheless, we have not had a functioning co-op program for the past several years, and human/financial resources available at the Department level for purposes such as this are not available. At some point in the future years the Regional and Urban Planning Program, Department of Geography and Planning, and College of Arts and Science may wish to re-visit the prospect of a co-operative program and re-design one accordingly, though no plans are in place at the present time to do so.

3.11 Is it likely or appropriate that another educational institution will offer this program if it is deleted at the University of Saskatchewan?

As the traditional program will still be available, this is unlikely.

<u>Other</u> 3.12 Are there any other relevant impacts or considerations?

No.

3.13 Please provide any statements or opinions received about this termination.

No statements received.



#### **MEMORANDUM**

#### COLLEGE OF ARTS AND SCIENCE

#### **DIVISION OF SOCIAL SCIENCES**

TO: Cathie Fornssler, Secretary, Academic Programs Committee

FROM: Harley Dickenson, Vice-Dean (Social Sciences)

DATE: October 28, 2010

RE: Deletion of the Co-operative Education Program in Regional and Urban Planning

\_\_\_\_\_

This memo confirms that the College of Arts and Sciences supports the deletion of the Co-operative Education Program in Regional and Urban Planning.

The proposal to terminate the program was submitted to the College Course Challenge in February 2010, and was approved by the Committee on Academic Programs and Standards for Humanities, Fine Arts and Social Sciences on March 26, 2010. The proposal was approved at the Division of Social Sciences meeting on September 24, 2010.

This program is unsustainable due to lack of resources, and has been for a number of years now. It is necessary to delete it in order to remove it from the Calendar, where its listing is only misleading rather than hopeful that it will return. While the loss of this program option is unfortunate, the traditional program will remain, and students in that program are able to take advantage of other experiential learning based courses available within the College.

Harley Dickinson

### Report Form for Program Termination University of Saskatchewan

**Department:** Philosophy **College:** Arts & Science

Program(s) to be deleted: Minor in Philosophy, Science and Biotechnology

Effective date of termination: May 2011

#### 1. List reasons for termination and describe the background leading to this decision.

The Minor in Philosophy, Science and Biotechnology is no longer viable because the courses relevant to the program (BTEC courses and AGEC 292) have ceased to exist. Biotech minors in Sociology and Cell Biology were canceled for similar reasons.

#### 2. Technical information.

2.1 Courses offered in the program and faculty resources required for these courses.

No courses or faculty resources are unique to this program.

2.2 Other resources (staff, technology, physical resources, etc) used for this program.

No resources used are unique to this program.

2.3 Courses to be deleted, if any.

None.

2.4 Number of students presently enrolled.

None.

2.5 Number of students enrolled and graduated over the last five years.

Only one student has completed this minor, and graduated in Spring 2006. There is no record of any other students having been enrolled.

#### 3. Impact of the termination.

#### Internal

3.1 What if any impact will this termination have on undergraduate and graduate students? How will they be advised to complete their programs?

Department advisors will work with current students to determine appropriate course substitutions where necessary.

3.2 What impact will this termination have on faculty and teaching assignments?

#### None.

3.3 Will this termination affect other programs, departments or colleges?

No.

3.4 If courses are also to be deleted, will these deletions affect any other programs?

N/A.

3.5 Is it likely, or appropriate, that another department or college will develop a program to replace this one?

Not likely.

3.6 Is it likely, or appropriate, that another department or college will develop courses to replace the ones deleted?

N/A

3.7 Describe any impact on research projects.

None.

3.8 Will this deletion affect resource areas such as library resources, physical facilities, and information technology?

No.

3.9 Describe the budgetary implications of this deletion.

None.

#### External

3.10 Describe any external impact (e.g. university reputation, accreditation, other institutions, high schools, community organizations, professional bodies).

None.

3.11 Is it likely or appropriate that another educational institution will offer this program if it is deleted at the University of Saskatchewan?

Not likely.

#### <u>Other</u>

3.12 Are there any other relevant impacts or considerations?

No.

3.13 Please provide any statements or opinions received about this termination.

No statements received.



#### **MEMORANDUM**

#### **COLLEGE OF ARTS AND SCIENCE**

#### **DIVISION OF SOCIAL SCIENCES**

TO: Cathie Fornssler, Secretary, Academic Programs Committee

FROM: David J. Parkinson, Vice-Dean (Humanities and Fine Arts)

DATE: November 9, 2010

RE: Deletion of the Minor in Philosophy, Science and Biotechnology

This memo confirms that the College of Arts & Sciences supports the deletion of the Minor in Philosophy, Science and Biotechnology.

The proposal to terminate the program was submitted to the College Course Challenge in August 2010, and was approved by the Committee on Academic Programs and Standards for Humanities, Fine Arts and Social Sciences on September 28, 2010. The proposal was approved at the Division of Humanities and Fine Arts meeting on October 27, 2010.

Enrolment in this program has been low. In addition, the BTEC 200 and 300 courses that were required for this program, and the BTEC 301 and 400 courses which were restricted electives have all been deleted. Additional changes have been made to the SOC courses used in the minor, to either offer them infrequently or refocus them away from Biotechnology. The combined result of these events is that the program is no longer sufficiently distinct from the Minor in Philosophy, Science and Technology to continue as a separate entity.

David J. Parkinson