University of Toronto
Major Modification Proposal:

New Freestanding Minor Where There is No Existing Specialist or Major

What is being proposed:
please specify exactly what is being proposed; i.e., a new freestanding minor (where there is no existing specialist or major) in...

A new freestanding Minor where there is no existing Specialist or Major in Digital Humanities

Department/unit (if applicable):
Woodsworth College

Faculty/academic division:
Arts and Science

Faculty/academic division contact:
Professor Mary Pugh, Acting Vice-Dean, Undergraduate and International
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Department/unit contact:
Prof. W. Brock MacDonald, Vice-Principal

Version date:
please change as you edit this proposal. January 29, 2018

1 Summary

- Please provide a brief summary of what is being proposed including:
  ▶ a clear statement of the relationship of this to other programs
  ▶ the impetus for its development in brief
  ▶ any distinctive elements

Digital humanities (DH) is an emerging discipline at the intersection of humanities, computing, and data science. DH studies human culture through computational means, and, in turn, studies the creation, analysis, and manipulation of digital data through humanist lenses. DH uses digital tools to disseminate knowledge and enable collaborative research. At its most insightful, DH is sturdily rooted in a humanities domain of knowledge, complementing this domain with its theoretical frameworks around knowledge and data, around digital analysis and representation. Because of this we envision DH as a minor program only. Its role will be three-fold: to immerse students in digital concepts, methodologies, and skills that they can take back to their discipline of specialization; to enable students to develop critical perspectives on the digital, bringing the insights of their discipline of specialization to DH and computing more generally; and to give humanities students the opportunity to conduct original DH research within U of T’s vital DH community of practice, aligning with the Faculty of...
Arts and Science’s prioritization of undergraduate research. The intellectual thread unifying the program is a focus on the central challenge of DH, that of digital representation. Digital representation includes the constructive and interpretive work that makes culturally historically situated humanities materials and perspectives amenable to computational approaches, and it also includes questions around what stories our digital artifacts tell, whose voices they invite in, and whose voices they silence or leave out.

2 Effective Date

March 1, 2018

3 Academic Rationale

- Describe what is being proposed and why.
- If relevant, describe the mode of delivery (including online) and how it is appropriate to support students in achieving the learning objectives of the program.
- Context
  - Discuss how the program addresses the current state of the discipline or area of study. (Identify pedagogical and other issues giving rise to the creation of this program. Where appropriate, speak to changes in the area of study or student needs that may have given rise to this development.
  - Describe the consistency of the program with the University’s mission and unit/divisional academic plan and priorities.
- Distinctiveness
  - Identify any distinctive/innovative aspects of the proposed minor.
  - As appropriate, speak to similar offerings elsewhere at the University of Toronto or at other universities.

Woodsworth College, a Constituent College of U of T, here proposes a new freestanding Minor program in Digital Humanities. Digital humanities (DH) is an emerging discipline at the intersections of the humanities with computing. DH studies human culture -- art, literature, history, philosophy, religion -- using computational tools and methodologies; and, in turn, DH also studies digital tools, methodologies, and communities through humanist lenses. Digital Humanities offers a set of methodologies for approaching traditional humanities areas of inquiry in an age when the materials that humanists study are increasingly digitally mediated: when historical and literary corpora are digitized, when cultural heritage is digitized for preservation and restoration, when scholars use digital tools for community engagement, when online communities create micro-worlds with cultures shaped by their technical platforms as well as the currents of wider cultures. And in turn, Digital Humanities
also enables critical perspectives on the digital, bringing humanities insights to bear on digital tools and platforms. Far from “replacing” traditional humanities disciplines, DH complements them. DH supports traditional areas of inquiry. Its tools open new ways for researchers to approach their materials, to collaborate with one another and disseminate their knowledge. And its critical engagement with the digital brings humanities modes of understanding and knowledge production into the world of data and algorithms.

Born as Computing for the Humanities in the mid-twentieth century, Digital Humanities came into its own with the data deluge of the mid-2000s: with the digitization of books and archives, from medieval manuscripts to early-twentieth century newspaper archives; with the digital preservation and restoration of endangered cultural heritage; with political crises reported and recorded live over Twitter; with petabytes of medical and climate change research; with the deepening online traces of our social lives. Digital humanists seek to understand this rich material and deal with the challenges it presents. DH tools and approaches enable new kinds of access, research, and scholarly communication, whether the researchers are medievalists comparing manuscripts from interoperable digital repositories, or new media scholars data-mining Twitter to study the 2011 revolution in Egypt, or linguists making indigenous language learning more widely accessible through digital platforms. The methodological framework of DH enables humanists — from established researchers to undergraduate students — to make immensely valuable contributions to the conversation around digital cultures and digital artifacts: about categories and ontologies, complicated and nuanced ways of classifying and understanding data; about the narratives that turn data into knowledge; about the equity concerns around access to digital technologies; about what it means to know, and what kind of knowledge (and whose knowledge) is authoritative, and what kind of knowledge (and whose knowledge) is silenced or left out.

DH minors are fairly consistent in structure across surveyed institutions, incorporating an introduction to DH; several elective courses cross-listed from other disciplines and departments, including Anthropology; Art; Cinema; Communications; Computer Programming; Computer Science; East Asian Languages and Cultures; English; French; History; Italian; Linguistics; Music; New Media Studies; Philosophy; Religious Studies; and, a capstone course where students create a major digital project. the curriculum of DH minors is consistent, covering the epistemological, ethical, and theoretical implications of digital media—as well as approaches such as close and distant reading, text analysis and mark-up, data mining, network analysis, visualization, modeling, geospatial analysis and mapping, multi-media storytelling, and information and interface design. (See Appendix 4.)

This Minor program will engage undergraduate students in the study of traditional humanities materials through computational tools and methodologies, inviting students to perform algorithmic analysis of large corpora of text, or to create digital maps of historical events or cultural phenomena, or to digitize an archival collection. The program will also invite undergraduate students to engage critically with digital tools and cultures: to analyze developments in computer science, data science, and digital culture and their social and cultural implications; and to consider issues of equity, of social and environmental impact raised by digital infrastructures. Students will work with digital humanists from many disciplines, data curators, librarians, and computer scientists, gaining a rich interdisciplinary expertise in applying digital approaches to humanities materials and, conversely, engaging critically with digital artifacts, platforms, and methodologies.
This Minor is designed to complement existing Major programs for students registered in Faculty of Arts and Science in such disciplines as Book and Media Studies, Cinema Studies, English, Geography, History, History & Philosophy of Science and Technology, Medieval Studies, Religion, and Urban Studies. The Minor will not be restricted to students in the humanities; students in the sciences and social sciences can also complement their studies with a Digital Humanities minor and thus bring a humanist perspective on data and digital representation, and a solid set of technical and data curation expertise, to their work in their home disciplines.

To make it complementary to so many other programs, the Minor will be structured very simply:

- First, students will take **2 required 200-level .5 FCE courses**, *Introduction to Digital Humanities* and *Virtual Worlds: Introduction to Spatial Digital Humanities* offered by Woodsworth College. These courses will provide an overview of the DH field as a whole, introducing students to UofT’s DH research landscape and equipping them with a basic toolbox of DH skills.

- Students will then choose **2 FCE** from a pool of courses that includes:
  - Other courses offered by Woodsworth College for the Digital Humanities minor, including WDW 35H1, WDW336H1, WDW337H1, WDW38H1 (see Appendix 2)
  - a wide array of cross-listed electives
    - Ideally, students will select among these for their relevance to their Majors. For example, Art students may select *Historical Archives in the Digital Age*, learning to build digital image archives and exhibits to tell the story of an artifact and integrate it in a wider cultural context; English students may select *Data*, learning to perform, visualize, and critique quantitative text analyses; and History students may select *From Book to Map to Video Game*, learning how to work collaboratively as they adapt a historical text for dissemination in different media.

- Students will then finish the minor with **1 FCE that should be a capstone experience**. The DH program will offer several half-courses to satisfy this requirement:
  - *WDW436H1: Topics in Digital Humanities*, a seminar that investigates a special topic (literary or historical) through a digital humanities lens. Within this course’s framework, students conduct course-specific research and produce a digital artifact to present their research.
  - *WDW435H1: The Internet Archive*, a seminar that focuses on the Internet Archive project as a case study to ground its theoretical exploration in the practical specifics of a long-lived, international digital project. Within this course’s framework, students focus on digitization, data curation, and data mining techniques, and complete a major collaborative project on a topic relevant to their major discipline, applying DH methodologies to Internet Archive data.
  - *WDW437H1: Research Projects in Digital Humanities*, an opportunity for undergraduate students in their third or fourth year to work on major Digital Humanities faculty research projects in three Humanities departments. Students become involved in original research and in the wider DH
collaborative research community, comprising graduate students, faculty, and technologists. Students also complete substantial research, bringing to an established faculty project the technical and critical analysis skills that they have been building throughout the program. NB offering this is contingent on obtaining necessary RA funding, following the model of the DH research modules involving Medieval Studies, History, and Religion over the past three years funded by FAS’s Step Forward initiative; see fuller note under 10.1, Faculty Requirements, below.

- Advanced, digitally inflected courses in other programs may be accepted as fulfilling this requirement at the discretion of the Program Coordinator.

This structure for DH undergraduate minors is well-established across North America, being the model for such programs in all comparator institutions. Nevertheless, our program will be distinctive because it will be embedded in our U of T community of research and practice. It will give humanities students the opportunity to conduct original DH research, as modelled by the 142 research faculty and over 50 graduate students and digital scholarship librarians in the newly-launched Digital Humanities Network. This opportunity would align the DH minor with the Faculty of Arts and Science’s prioritization of undergraduate research, and with the President’s priority for “revitalizing undergraduate education in the humanities.”

4 Need and Demand

- Provide a brief description of the need and demand for the proposed minor focusing, as appropriate, on student interest, societal need, employment opportunities for prospective graduates, accreditation requirements.

As of 2016, more than 190 DH research centres operate at universities around the world.\(^1\) Until the early 2000s, DH education was mostly ad-hoc, project-based learning.\(^2\) However, a recent survey demonstrates that education in DH theories and methodologies has entered the formal curricula of higher education institutions across North America, at both the undergraduate and the graduate levels.\(^3\) In the United States, DH Minor programs are offered at UCLA; Stanford; the University of Pennsylvania; the University of Michigan; and the University of California, Santa Barbara. In Canada, DH education is developing swiftly: there are currently curricular DH programs active at eight of Canada’s top ten universities -- McGill, McMaster, Queens, U of Alberta, U of Calgary, U of Montreal, Western, Waterloo, as well as the DH training powerhouse UVic -- with only U of T and UBC lacking DH programs. In Ontario, UofT is the only major university that still lacks curricular DH training; Carleton, McMaster, Western, and Guelph all possess either undergraduate or graduate initiatives, most as DH

\(^1\) Based on data from centerNet, an international network of digital humanities centers

\(^2\) Lewis, Spiro et al., above.

\(^3\) See Appendix 4.

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minors, some as graduate-level specializations or certifications. Among Ontario’s major institutions, UofT is the only one without a formal DH program, either graduate or undergraduate (compared to Carleton University, McMaster University, University of Ottawa, University of Western Ontario, and University of Guelph).

The University of Toronto has been supporting pioneering digital humanities research and teaching projects since the 1970s. Currently, under the aegis of the Jackman Humanities Institute, the Digital Humanities Network connects more than 200 UofT scholars, of whom 142 are research faculty. The Space and Mapping working group at the Jackman Humanities Institute connects scholars who do work on space, place, and maps—often in digital media. For example, an innovative cluster of research teams, in a pilot project funded by FAS’s STEP Forward initiative, currently places qualified undergraduates into existing research teams where they work alongside graduate students, supervised by faculty, on projects with a strong digital component. In the pilot year (2016-17), these projects are based in HIS (DECIMA), REL (Story Nations), and ENG (Dictionary of Old English). Undergraduate students participate in research within the specific projects; this highly focused work is complemented by a set of workshops that familiarize students with the intellectual landscape and skills of Digital Humanities more broadly. This would be the kind of opportunity, made sustainable by its inclusion within a Minor program, for undergraduate students to experience the research life of U of T’s vibrant DH community.

In addition to giving students the opportunity to conduct original DH research, a DH minor would also empower students to intervene in wider social conversations about the digital worlds we increasingly inhabit—conversations around the mechanisms, social and technological, that turn Big Data into knowledge; conversations around misinformation disseminated along the well-worn channels of cultural narratives; around the significance of virtual communication for social and cultural life; around access, equity, and digital divides; around the social and environmental impact of digital infrastructures.

The knowledge and skills that students acquire would also equip them for advanced degrees or careers as library and cultural heritage professionals, data analysts, data design specialists, data curators, usability and interface design specialists, and social media specialists. ‘Tracking its students’ career paths, UCLA’s DH minor reveals that their recent graduates are “helping Oracle build databases; coordinating UCLA’s social media campaigns; making videos for UCLA’s Communications division; entering the library profession; working for museums; [studying] in law school; and learning about information design [in graduate school].”

(http://www.cdh.ucla.edu/curriculum/undergraduate-minor/)

5 Admission/Eligibility Requirements

- Describe any specific requirements that students must meet to be eligible for the proposed minor and how these will be administered.

Admission to the Digital Humanities Minor is unrestricted. Enrolment is open to students who have completed 4.0 FCEs.
6 **Requirements for the Minor**

- Describe in your own words the requirements and structure of the minor.

  - 4 FCEs
  - Prerequisites for program admission: 4 completed FCEs
  - Required introductory courses: WDW235H1, *Introduction to Digital Humanities*, and WDW236H1, *Virtual Worlds: Introduction to Spatial Digital Humanities* = 1 FCE (NB These courses were approved last year and are being taught in the current academic year, providing the first cohort of students for the proposed Minor)
  - 2 FCEs selected from 200- and 300-level DH courses at Woodsworth or from courses cross-listed from other FAS programs (cross-listings will include courses from Book & Media Studies, Cinema Studies, Computer Science, English, Geography, History, History & Philosophy of Science, Music, Medieval Studies, Study of Religion, Statistical Science, and Urban Studies.
  - 1 FCE at the 400 level to complete the program, comprised of either seminar courses or research opportunities designed to provide a capstone experience, to be chosen from:
    - WDW435H1: The Internet Archive
    - WDW436H1: Topics in Digital Humanities
    - WDW437H1: Research Projects in Digital Humanities
    - 400-level H courses in digital topics offered by other FAS units, with the approval of the Program Coordinator.

- Provide, as an appendix:
  - An exact program description as it will appear in the undergraduate calendar, including all required courses and recommended electives and their prerequisites.
  - A detailed copy of the program requirements as they will appear in the undergraduate calendar, including all required courses and recommended electives and their prerequisites.

- Provide, as an appendix:
  - A full list of the course numbers and titles, indicating clearly whether they are new or existing. (Please note that new courses need to be proposed and approved separately following established Faculty/divisional procedures.)

  **Appendix 1**, proposed calendar copy, including a list of cross-listed elective courses from other units.
  **Appendix 2**, list of course numbers and titles for existing and new Woodsworth College courses for the program.
  **Appendix 3**, letters of support from other departments/programs, including permissions to cross-list courses and commitments re other forms of cooperation/collaboration.
  **Appendix 4**, Survey of DH programs in North America.
7 Program Structure, Learning Outcomes and Degree-Level Expectations (DLEs)

- Address how the design, structure, requirements and delivery of the program support the program learning outcomes and DLEs.
- Identify DLEs, how each is addressed in this particular program and specify how the program design and requirements support the attainment of student learning outcomes. Proponents may find the language in the table useful or should feel free to use their own.

<table>
<thead>
<tr>
<th>Degree Level Expectations</th>
<th>Program Learning Outcomes</th>
<th>How the program design / structure supports the degree level expectations</th>
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<td><strong>Depth and Breadth of Knowledge</strong></td>
<td>Critical perspective: Upon completion of the DH Minor, students will be equipped to engage critically with digital tools and cultures. That is, students will be able to analyze knowledge production in digital media; developments in computer science, data science, and digital culture and their social and cultural implications; and issues of equity and of social and environmental impact raised by digital infrastructures.</td>
<td>Critical perspective: In 200-level courses, students are introduced to, and trained in: critical reading of Digital Humanities scholarship across diverse domains; critical analysis of Digital Humanities projects and platforms; and, through guest lectures and field trips, analysis of Digital Humanities research and practice in the University of Toronto community. Small-scale assignments invite students to read and engage with Digital Humanities scholarship, from data sets or visualizations to scholarly arguments. Finally, students become familiar, through field trips and guest lectures, with a variety of Digital Humanities projects and approaches that highlight the diversity of DH’s intellectual landscape at the University of Toronto.</td>
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<td>Depth of Knowledge is attained through a progression of introductory, core, and advanced courses. Advanced courses will be at the 300 and 400 levels. Some of these courses are Digital Humanities courses; others are Digital Humanities-inflected courses from the students’ major or specialist disciplines. Together, these courses provide solid knowledge of Digital Humanities concepts and approaches, and demonstrate how Digital Humanities concepts and approaches are</td>
<td>Technical expertise: Students will possess technical expertise in a variety of domains pertinent to digital humanities scholarship: digital storytelling, digital archives, data modeling, data management, text encoding, text analysis, programming, spatial humanities, mapping and GIS, data visualization, and usability. This expertise enables them to construct rigorous,</td>
<td>Technical skills: Students become familiar, through live demonstrations and hands-on workshops, with a variety of tools for basic DH analytical tasks.</td>
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<td>In higher-level courses, students are invited to synthesize and critically engage digital humanities scholarship in their writing. Students discuss and critically engage digital humanities scholarship and projects in seminar-style discussions. Students also practice evaluating digital humanities projects and artifacts by conducting usability tests, crafting data management plans, and engaging with major funding agencies’ criteria for digital humanities scholarship success.</td>
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<td>In 200-level courses, students complete small in-class projects that may involve the creation of digital exhibits and archives, TEI-compliant text encoding, text analysis, mapping and GIS, data visualization, and usability studies. Digital technologies are introduced during in-class, hands-on sessions, in which students develop digital artifacts under the instructor’s guidance.</td>
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<td>In 300- and 400-level courses, students build on previous expertise to conduct a piece of original research and communicate it through a digital artifact. In so doing,</td>
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<td><strong>applied and utilized across disciplines.</strong></td>
<td><strong>usable, and sustainable digital artifacts to raise and address research questions.</strong></td>
<td>students come to engage with more complex data; more extensive and specific scholarly research; and more sophisticated, technically demanding, and powerful platforms. In-class instruction is supplemented by laboratory workshops on selected topics and technologies delivered by invited speakers from the University of Toronto Libraries or the University of Toronto’s Digital Humanities Network (as of May 2017, this network comprises over two hundred faculty, librarians, graduate students, and technologists; 150 of its members are UofT faculty).</td>
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<td><strong>Breadth of Knowledge</strong> is attained through exposure to a variety of: scholarly digital humanities projects; modes of thinking, methods of analysis; and technical approaches that underpin different humanities fields and approaches.</td>
<td><strong>Project management skills:</strong> Students will possess project management skills that enable them to design, establish the scope of, and execute a collaborative digital project, within or beyond the academic sphere.</td>
<td>Finally, in 400-level courses that provide capstone experiences, students build on their DH expertise as well as their discipline-specific knowledge to undertake faculty-guided original research. In Digital Humanities, these 400-level courses include two types of research opportunities: research conducted as major course projects, with a team of student collaborators, in which students will have to experience and address the challenges and limitations they encounter in completing a team-based digital humanities project; and a Digital Humanities Team-Based Research course, where students work as research assistants on faculty projects, side by side with graduate student assistants, conducting original research with authentic scholarly data, and problem-solving and analyzing the limitations of data, knowledge, and technical frameworks.</td>
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<td><strong>Project management:</strong> Students learn the basics of project management, the discipline of planning, executing, and managing the work of a team to carry out a project successfully. In 200-level courses, project management is modelled through scaffolded assignments that recreate project planning frameworks, from initial project definition, scoping, and risk management to the agile development of project components. Lectures explicitly address project management, and scaffolded assignment components receive instructor feedback on each step, instructing students on expectations at each stage of project development.</td>
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<td>In 300- and 400-level courses, students develop their own research projects—often collaboratively—they refine their technical skills and project management skills by defining their project’s research question and scope, finding resources, managing a team of collaborators, setting timetables and deliverables, and building and documenting a complex DH artifact of their research. Instructor consultations are explicitly included in course syllabi and project requirements, so that students can receive just-in-time feedback at each step.</td>
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<td>Knowledge of Methodologies</td>
<td>Students know, and are able to critically engage with, a variety of scholarly projects, digital platforms, and theoretical approaches. Students possess technical expertise in the following Digital Humanities areas of activity: digital storytelling, data modeling, data management, digital archives, TEI-compliant text encoding, text analysis, basic programming, spatial humanities, mapping and GIS, data visualization, and usability. Students are familiar with a range of tools, digital and conceptual, pertaining to these areas of activity. In advanced courses, students are also equipped to research and independently learn tools and skills for their own digital research projects.</td>
<td>In 200-level DH courses, field trips and guest lectures familiarize students with a variety of Digital Humanities projects and approaches that highlight the diversity of DH’s intellectual landscape at the University of Toronto. Small-scale assignments invite students to profile these projects and examine these projects’ scholarly purpose, driving argument, data, digital platforms, and theoretical points of view. Moreover, in each of the core Digital Humanities courses, students learn by making. They build digital archives and narratives; TEI-compliant miniature text editions; digital maps; data visualizations; and simple programs. In 200-level courses, students learn the technologies involved in these projects through hands-on in-class workshops; receive step-by-step documentation; conduct their work in an instructor-facilitated environment; and receive multiple opportunities to workshop their work with the instructor’s assistance. In advanced courses, students also receive training in diverse approaches and tools through workshops conducted by the University of Toronto’s libraries or Digital Humanities Network.</td>
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<td>Application of Knowledge</td>
<td>Students are able to frame research questions, and model and collect data to address these research questions rigorously and robustly. Students possess technical expertise in a variety of domains: data modeling, data management, text encoding, text analysis, programming, spatial humanities, mapping and GIS, data visualization, and usability. This expertise enables them to construct rigorous, across Digital Humanities courses, major assignments invite students to complete small research projects with two components: a digital artifact and a written reflection on the light shed by their digital artifact on their research question. Digital artifacts include digital archives, multimedia narratives, data visualizations, or digital maps. When students build digital artifacts, one assessment criterion is: does it work? Does the exhibit, visualization, code, or map function correctly? This requires students to master technical tasks such as text encoding, metadata creation, digital mapping, or programming. Students learn how to perform these technical tasks through regular in-class, hands-on workshops. In 200-level courses, students use easy-access, in-browser tools for storytelling and analysis. In 300- and 400-level courses, students progress to more complex data and more powerful, sophisticated digital tools and platforms. In lower-year courses, digital technologies are introduced during in-class, hands-on sessions, in which students develop...</td>
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<td>usable, and sustainable digital artifacts to address their research questions. Students are able to use their project management skills to design, establish the scope of, and execute a collaborative digital project, within or beyond the academic sphere.</td>
<td>digital artifacts under the instructor’s guidance. In upper-year courses, in-class instruction is supplemented by laboratory workshops on selected topics and technologies delivered by invited speakers from the University of Toronto Libraries or the University of Toronto’s Digital Humanities Network (as of May 2017, this network comprises over two hundred faculty, librarians, graduate students, and technologists; 150 of its members are UofT faculty). Students consolidate their knowledge through problem-based learning scenarios, where students address—for example—ethical or data preservation quandaries from the perspective of scholars, cultural heritage professionals, or data analysts. Finally, in 400-level courses that provide capstone experiences, students build on their DH expertise as well as their discipline-specific knowledge by undertaking faculty-guided original research. These 400-level courses include two types of research opportunities: research conducted as major course projects, with a team of student collaborators, in which students will have to experience and address the challenges and limitations they encounter in completing a team-based digital humanities project; and a Digital Humanities Team-Based Research course, where students work as research assistants on faculty projects, side by side with graduate student assistants, conducting original research with authentic scholarly data, and problem-solving around the presentation and analysis of this research through digital media. Throughout the Digital Humanities minor, students learn the basics of project management, the discipline of planning, executing, and managing the work of a team to carry out a project successfully. In 200-level courses, project management is modelled through scaffolded assignments that recreate project planning frameworks, from initial project definition, scoping, and risk management to the agile development of project components. In more advanced courses, as students develop major projects—often collaboratively—they refine their technical skills and project management skills by defining their project’s research question and scope, finding resources, managing a team of collaborators, setting timetables and deliverables, and building and documenting a complex DH artifact of their research. Throughout the program, assignment components are assessed separately from the finished assignment. This means that students must complete each component, following best-practices project management trajectory; process “counts,” not only the final product.</td>
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<td><strong>Awareness of the Limits of Knowledge</strong></td>
<td>Students understand how data models, digital platforms, and algorithms enable new forms of knowledge gathering, discovery and storytelling, and collaboration—but at the same time, how these digital objects exact social or environmental costs, and how these digital objects may act as filters for knowledge or barriers to community participation. This awareness of limitations enables students to address the ethical, social, and ecological impacts of digitally mediated knowledge-making and digital technologies.</td>
<td>In Digital Humanities courses, students explore bodies of knowledge—literary texts, historical archives, or cultural heritage artifacts—through the lens of DH tools and methodologie, and are invited to compare the conclusions suggested by different methodologies, becoming aware of each methodology’s affordances and shortcomings. At the same time, students explore data models and digital platforms, and ask questions about the research questions and understandings that underlie these models and platforms; about the kind of knowledge these models and platforms enable or discard; about the ecological and social impacts of digital technologies; about the user communities they invite or marginalize, in terms of technical preparation, point of view, cultural and economic standing, access to technology, race, gender, and disability. In assignments, students are invited to explore such initiatives as open data and open-source technologies, international data standards, minimal computing, critical making, and global digital humanities, and learn how these different areas conceptualize and influence access and knowledge-making. In advanced courses (300- and 400-level), students use professional tools to explore the limitations of digital projects: they learn how to conduct data management assessments and usability studies, and they assess existing and projected digital humanities projects by using major humanities funders’ criteria for rigorous, functional digital humanities scholarship. Students’ analytical work is assessed for clarity of argument, depth and detail of analysis, awareness of limitations, and engagement with secondary scholarship. In digitally inflected courses cross-listed from other disciplines, students experience how different arts and humanities disciplines engage with digital technologies, and how these technologies enable different forms of knowledge, communication, and collaboration. In so doing, students become aware of commonalities and differences across disciplines, and of the benefits and limitations of interdisciplinary inquiries. Finally, in 400-level courses that provide capstone experiences, students come to grips with “live” research—their own or that of faculty members. This process enables them to experience the difficulties, limitations, and uncertainties that arise during the development of a digital humanities research project.</td>
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<td><strong>Communication Skills</strong></td>
<td>Within the research sphere, students are able to communicate research questions and findings in both written form and through scholarly digital artifacts. Within the public sphere, students are able to frame nuanced, evidence-based narratives and arguments about digital discourses, knowledge production, and communities; about sustainability, equity, and social and environmental impacts of digital media and digital knowledge production. Students are able to communicate these narratives and arguments both through written essays and through digital artifacts such as maps, archives, or visualizations. Students are aware of rhetorical choices—verbal and visual—that enable writers to communicate most clearly to both academic and non-academic audiences.</td>
<td>Student work: In each DH course offered through Woodsworth College, students practice communication in digital environments, from brief blog posts to longer multimedia essays. They examine digital scholarship and media, from digital narratives to archives and datasets, and they approach issues such as data preservation and community engagement through role playing scenarios that invite students to assume the roles of cultural heritage professionals, librarians, technologists, or software users. Assessment: Students’ work is assessed for students’ ability to articulate ideas clearly and persuasively within a digital environment. For example, assignments are graded not only based on prose, but also on their visual aspect (clarity, user-friendliness, ease of navigation, persuasiveness) and on the thoroughness of the metadata documenting their digital objects. Support: Digital assignments are scaffolded, so students can develop ideas, metadata, and visual representations over several iterations, from proposals to prototypes to finished projects. Students receive instructor feedback and support at each iteration.</td>
</tr>
</tbody>
</table>
**Autonomy and Professional Capacity**

The Minor equips students with a rigorous suite of skills in digital storytelling, digital archives, data management and analysis, digital storytelling, coding, mapping, usability, and project management. In so doing, the Minor positions students to enter graduate education and professional fields, and to bring their humanities training as critical readers, writers, and analysts to bear on public and professional conversations in digital environments.

Students have the analytical, interpretive, and communication skills they need to become informed, independent, and creative participants in public conversations around digital cultures and digital artifacts. They have the critical thinking skills to become not only consumers, but active creators of digital artifacts.

Students have the technical and project management skills they need to conceive of and plan a digital project; to select digital tools and platforms for data collection, storage, and communication; and to build digital artifacts—maps, timelines, visualizations, or multimedia stories—that marshal data into persuasive arguments. Students are able to translate these skills from an academic to a work environment.

Students are aware of the cultural, social, ethical, and environmental dimensions of digital culture and digital artifacts. They are able to address questions that range from the digital preservation of at-risk cultural heritage to the environmental impact of computing information. And they are equipped to translate these theoretical frameworks into best practices in their work and research lives.

Students’ autonomy and professional capacity is cultivated through simulation- and problem-based learning. In 200-level DH courses offered through Woodsworth College, students approach issues—for example, the ethics of data collection and preservation; political, economical, social, and environmental impacts of computing resources and technologies; the creation and maintenance of resilient archives—through role playing scenarios that invite students to assume the roles of cultural heritage professionals, librarians, technologists, or software users. Role playing scenarios are framed by classroom instruction and secondary literature, and guided by the instructor.

Problem-based learning invites students to practice putting their classroom learning into practice. It also makes visible future pathways along which students can leverage their expertise as humanities scholars and digital humanists within a variety of professional environments, from positions as corporate data analysts to positions as cultural heritage professionals.

In 300- and 400-level DH courses, problem-based learning moves beyond “domesticated” classroom simulations to more complex and authentic datasets and situations. Students work with authentic data sets (whether preserved by the Internet Archive or collected by the Government of Canada). These confront students with realistic situations and challenges; they also offer students to craft ideas and digital artifacts of wider relevance beyond their classroom.

Finally, in 400-level courses that provide capstone experiences, students build on their DH expertise as well as their discipline-specific knowledge to undertake faculty-guided original research. This not only enables students to explore cutting-edge research; it also allows students to test out and build towards the possibility of graduate studies in their discipline.

Throughout the program, guest lectures and conversations with a variety of potential role models—digital humanities scholars, artists, technologists, and librarians—bring authentic challenges and projects into the classroom and connect students to potential role models and mentors.

Students’ work is assessed both as “process” and as “product.” The focus on process enables students to receive feedback and credit for each step of their work, from data collection to analysis and communication. This in turn encourages best practices in data curation and project management. The focus on the final product encourages the production of rigorously built, persuasive, usable digital artifacts, which in turn can be used by students as part of a professional portfolio as they begin postsecondary careers or apply for postsecondary education.
8 Assessment of Teaching and Learning

- Describe how the methods for assessing student achievement are appropriate and effective relative to established program learning outcomes and degree-level expectations.

In addition to traditional essays and tests that measure students’ knowledge and understanding of the fundamental concepts and ideas that define the intellectual landscape of Digital Humanities, students will learn by making – by experimenting with digital tools and applying their computing and data design skills to build digital artifacts as the outcomes of their research. Digital artifacts will be assessed according to guidelines suggested in Alan Galey and Stan Rucker’s “How a prototype argues” (Literary and Linguistic Computing (2010) 25 (4): 405-424): substantive argument; rigorous research as demonstrated by project data and metadata; solid project management as demonstrated through rigorous documentation of the project’s making; and technical proficiency of the project, in terms of functionality, code correctness where applicable, and usability. At the end of the winter term, Woodsworth College will host a mini-conference that allows DH students to exhibit their major projects to the wider campus community. Projects may also be hosted and publicized through university-hosted digital exhibitions.

9 Consultation

- Describe any consultation with programs and units that may be affected.

After meetings with the Humanities Chairs as a group and with members of the Jackman Humanities Institute Digital Humanities Network early in our program planning process, we have met with the Chairs/Undergraduate Associate Chairs/Program Coordinators of the following units/programs and secured agreement to cross-list some of their courses and in some cases to participate in other aspects of the program which will be developed later, pending funding availability; letters of agreement are in Appendix 3. We expect to consult with other Humanities units not listed here in the near future to explore potential involvement with them as well.

- Book & Media Studies
- Cinema Studies
- Computer Science
- English
- History
- History and Philosophy of Science and Technology
- Geography
- Music
- Medieval Studies
10 Resources

- Describe any resource implications of the change(s) including, but not limited to, faculty complement, space, libraries and enrolment/admissions.
- Please be specific where this may impact significant enrolment agreements with the Faculty/Provost’s office.
- Indicate if the major modification will affect any existing agreements with other institutions, or will require the creation of a new agreement to facilitate the major modification (e.g., Memorandum of Understanding, Memorandum of Agreement, etc.). Please consult with the Provost’s office (vp.academicprograms@utoronto.ca) regarding any implications to existing or new agreements.

- Academic advising for students interested in the program will be important, to help them design their Minors to complement their Majors/Specialists most effectively. Woodsworth College’s Academic Advisors team and its Program Office staff will be able to provide this support using existing resources.
- IT needs: Woodsworth’s IT department can support the program’s general IT requirements. NB all the software that students will need to work with in the core DH courses will be free, open-source programs/platforms.

10.1 Faculty Requirements

- Brief statement to provide evidence of the participation of a sufficient number and quality of faculty who will actively participate in the delivery of the program,
  - Discuss the role of any adjunct or contractual faculty,
  - Comment on the provision of supervision of experiential learning opportunities, as appropriate.
  - If relevant, describe the plan to provide additional faculty resources to support the program.

Regarding the core faculty committed to participate in the delivery of the program (see Table 1 below):

- Professor Alexandra Bolintineanu, Woodsworth College’s newest Teaching Stream appointment (cross-appointed with the Centre for Medieval Studies), was hired specifically for her expertise in DH to develop and teach in this program: she will teach the two required 200-level H courses each year and an additional higher level
Developed by the Office of the Vice-Provost, Academic Programs  
Template updated on March 7, 2017  

- Other Woodsworth College faculty will participate in the delivery of the program in the near future, developing DH courses in their own subject areas. Professor Theresa Moritz is prepared to teach a course in the program immediately; Professor Brock MacDonald will develop a course for the program which he will offer beginning in 2019-20. The College is currently searching for an additional Teaching Stream appointment (closing Feb 10, position commencing July 1 2018); the successful candidate will teach in the DH Minor as well as in other Woodsworth programs.
- We have no plans to employ adjunct or contract faculty on a regular basis.

Based on discussions both formal and informal over the past year and more, we expect that a number of non-Woodsworth faculty and Librarians not listed in Table 1 below (Committed Faculty) will participate in the delivery of the DH Minor program, contingent on negotiating the form(s) of our collaboration. The participation we anticipate is in two areas:

1. Provision of capstone research experiences (WDW437H1, or similar DH research opportunities provided by other units which may be open to DH Minor students). For the past three years, FAS’s STEP Forward initiative has provided the RA funding needed to support a project that places qualified undergraduates in existing research teams where they work alongside graduate students, supervised by faculty, on projects with a DH component (2015-16, for one module; 2016-17, for three modules; 2017-19, for four modules). A module in the Dictionary of Old English (DOE) was the first of these, sponsored by the Centre for Medieval Studies (Professor Suzanne Akbari); in 2016-17 modules in the DECIMA project led by Professor Nick Terpstra (History) and the Story Nation project led by Professor Pamela Klassen (Study of Religion) were added; the 2017-19 modules will include DOE, DECIMA, and Story Nations. Other faculty and projects who expressed interest in future iterations include Professor Ann Komaromi (Comparative Literature), leading the Samizdat project, and Professor Guillaume Thomas (Linguistics), researching Tupi Guarani languages. Professors Akbari, Terpstra, and Klassen have been actively involved in the planning of our proposed DH Minor; their units and several other interested departments / programs have agreed to partner with Woodsworth to work towards securing funding to support providing more such opportunities in future. See the letters in Appendix 3 from Book and Media Studies (Professor Randy Boyagoda, Principal of St. Michael’s College), Cinema Studies (Professor Corinn Columpar), History (Professor Nick Terpstra), and the Centre for Medieval Studies (Professor Suzanne Akbari); the letter from Professor Paul Stevens of English indicates that that department is also prepared to participate in initiatives of this kind at a future date, depending on the availability of interested faculty doing relevant projects. Outside the Humanities, the departments of Computer Science and Statistical Science have also committed to exploring collaborating with us in this area, as well as with respect to point 2 below; the technical expertise they offer will be of enormous value to the program (see the letters from Professor Francois Pitt of CS and Professor Alison Gibbs of STA).

2. Enrichment of the curriculum and the student experience throughout the DH Minor thanks to contact with faculty and Librarians working in DH-related areas, taking such forms as guest lectures, field trips to DH-related research facilities at U of...
T and beyond, the development of special instructional modules for inclusion in DH courses, and the possibility of developing joint courses. Beyond the unit-level commitments documented by the letters in Appendix 3 mentioned above, we have had extensive informal discussions about these possibilities with many individual faculty engaged in DH research and teaching, including Professor Ann Komaromi (Comparative Literature), Professor Scott Richmond (Cinema Studies), and Professor Hal Momma (English, Dictionary of Old English). Several of these faculty have made guest appearances in this year’s WDW235H1 and 236H1 classes. Librarians with DH expertise with whom we are in regular contact include Sian Meikle, Director of Library Information Technology Services (on whose systems and infrastructure expertise we have drawn throughout); Leslie Barnes, Digital Scholarship Initiatives (who provides consultation and infrastructure support); P. J. Carefoote, of the Fisher Rare Books Library (who provided a lecture and hands-on rare book experience for WDW235H1 at the Fisher this year), Marcel Fortin of the Map and Data Library (who hosted Woodsworth’s DH students for a field trip last year); Mike Spears of the MADlab (who will be hosting WDW236H1’s students for 3D printing), Data Visualization Librarian Kelly Schultz (who will be hosting WDW236H1’s students for an in-lab mapping workshop), and members of the AR/VR Interest Group led by Educational Technology Librarian Diane Michaud (who helped organize a field trip to the CHISIL facility at Sick Children’s Hospital for DHN-affiliated faculty and librarians this year).

The foregoing points indicate the extraordinary wealth of Digital Humanities expertise and resources at U of T upon which we are already drawing as we develop the DH Minor. Once the program is established and as it grows, maintaining and expanding its connections throughout the U of T DH community will be an ongoing priority.

**Table 1: Detailed List of Committed Faculty**

<table>
<thead>
<tr>
<th>Faculty name and rank</th>
<th>Home unit</th>
<th>Area(s) of Specialization</th>
<th>Participation in the Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandra Bolintineanu, Assistant</td>
<td>Woodsworth College / Centre</td>
<td>Digital Humanities, Medieval Studies</td>
<td>Program Coordinator; teaches the 200-level introductory H courses, will teach at least one other course per year beginning 2018-19</td>
</tr>
<tr>
<td>Professor, Teaching Stream</td>
<td>for Medieval Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theresa Moritz, Associate Professor</td>
<td>Woodsworth College</td>
<td>English, Popular Culture</td>
<td>Available to teach at least one course per year beginning 2018-19</td>
</tr>
<tr>
<td>Teaching Stream</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W. Brock MacDonald</td>
<td>Woodsworth College</td>
<td>English, Popular Culture</td>
<td>Available to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Associate Professor, Teaching Stream | teach at least one course per year beginning 2019-20

New Teaching Stream hire (search in progress; commencing July 1 2018) | Woodsworth College | Indigenous Cultures and Societies | Available to teach at least one course per year beginning 2019-20

10.2 Space/Infrastructure
- Address any unique space/infrastructure requirements including information technology, laboratory space and equipment, etc.

Teaching space: We have already started discussions re securing regular use of one of the Library’s computer teaching spaces for the 200-level required courses.

IT needs: Woodsworth’s IT department can support the program’s general IT requirements.

NB all the software that students will need to work with in the core DH courses will be free, open-source programs/platforms.

11 UTQAP Process

The UTQAP pathway is summarized in the table below.

<table>
<thead>
<tr>
<th>Steps</th>
<th>Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development/consultation with the unit</td>
<td>From Spring 2016 through January 2018</td>
</tr>
<tr>
<td>Consultation with Dean’s office (and VPAP)</td>
<td>March 2017, April 2017, November 2017, January 2018</td>
</tr>
<tr>
<td>Faculty/divisional council</td>
<td>February 14, 2018</td>
</tr>
<tr>
<td>Submission to Provost’s office</td>
<td></td>
</tr>
<tr>
<td>AP&amp;P—reported annually</td>
<td></td>
</tr>
<tr>
<td>Report to Ontario Quality Council</td>
<td></td>
</tr>
</tbody>
</table>
Minor Program in Digital Humanities (Arts)

Program Description

Digital humanities (DH) is a discipline at the intersections of the humanities with computing. DH studies human culture -- art, literature, history, geography, religion -- through computational tools and methodologies; and, in turn, DH studies the digital through humanist lenses. Digital humanists study social media phenomena or medieval manuscript archives; computationally analyze thousands of newspaper articles to trace economic developments; construct video games to study literary narratives; or resurrect historical cities through digital maps and virtual reality exhibits.

In introductory and advanced DH courses, students learn about the intellectual landscape of digital humanities scholarship. They learn how to build digital stories, exhibits, and maps; how to digitize rare books; how to analyze collections of data; how to construct digital models and 3D-print them; and how to manage major digital projects. By the end of the program, students conduct a major DH research project of their own or participate in the research of an established faculty project. Throughout the program, students gain a critical perspective on digital technologies, learning to consider the ways digital platforms shape, and are shaped by, the currents of wider social and cultural forces.

By providing this critical and technical skillset, the Digital Humanities Minor prepares students for future paths that range from graduate studies in literature, history, library science, education, or computer science, to careers as technical writers, data analysts and visualizers, project managers, or programmers.

Students should note that some courses at the 200, 300, and 400 levels may have additional prerequisites.

Permission to count courses that are not on the list below towards the Minor in Digital Humanities must be received from the Program Coordinator, and will be granted on a case-by-case basis when the student’s work demonstrably and substantially engages Digital Humanities-related content or research methods.
Enrolment Requirements

This is a Type 1 Program. Enrolment is open to students who have completed 4.0 FCEs.

Completion Requirements

This program requires the completion of four full credits (4 FCEs): 1.0 credit from group 1 (required introductory courses); 2.0 credits from group 2 (digital humanities and cross-listed courses); and 1.0 credit from group 3 (capstone experiences).

1. 1.0 FCE at the 200 level, composed of the following two required introductory courses: WDW235H1, WDW236H1
2. 2.0 FCE to be chosen from the following courses, which include Digital Humanities courses offered by Woodsworth College and cross-listed courses offered by other departments:
   a. WDW335H1, WDW336H1, WDW337H1, WDW338H1
   b. Cross-Listed Courses
      i. Book and Media Studies: SMC228H1, SMC229H1, SMC255H1, SMC392H1
      ii. Cinema Studies: CIN260H1, CIN312Y1, CIN360H1
      iii. Computer Science: CSC104H1, CSC108H1, CSC300H1
      iv. English: ENG287H1
      v. Geography: GGR271H1, GGR272H, GGR273H1, GGR349H1, GGR452H1
      vi. History & Philosophy of Science & Technology: HPS202H1, HPS203H1
      vii. Medieval Studies: MST201H1, MST202H1
      viii. Music: MUS300H1
      ix. Religion: RLG233H1, RLG307H1, RLG308H1
      x. Statistical Sciences: STA201H1, STA221H1, STA220H1
      xi. Urban Studies: INI235Y1, INI308H1, INI333H1
3. 1.0 FCE that provides a capstone experience, either 2 H courses or one Y course, chosen from the list below:
   a. WDW435H1, WDW436H1, WDW437H1
   b. Other fourth-year courses with a significant DH practicum element, such as CDN435Y1 (Active Citizenship), can also be considered for inclusion in the capstone experience, if students receive written permission of the Digital Humanities Program Coordinator within the first two weeks of enrollment in the course.
Appendix 2: Woodsworth College Digital Humanities Courses

WDW235H and 236H were approved in 2017 and are being taught for the first time in 2017-18. The remaining courses will be presented to the FAS Humanities Curriculum Committee for approval along with the program itself during the current cycle. We plan to add further courses during the 2018-19 approval cycle.

Existing Courses:
WDW235H1   Introduction to Digital Humanities
WDW236H1   Virtual Worlds: Introduction to Spatial Digital Humanities

New Courses:
WDW335H1:   From Book to Map to Video Game: A Text and its Digital Transformations
WDW336H1:   Cultural Literacy in the Digital Age
WDW337H1:   Historical Archives in the Digital Age
WDW338H1:   Data: Access, Creation, Curation, and Interpretation
WDW435H1:   The Internet Archive
WDW436H1:   Topics in Digital Humanities (First planned topic: Medieval Wonders, Digital Approaches)
WDW437H1:   Research Projects in Digital Humanities
Appendix 3: Letters of Support

Attached are letters from the following units:

- Book and Media Studies
- Cinema Studies
- Computer Science
- English
- Faculty of Music
- Geography
- History
- History and Philosophy of Science and Technology
- Medieval Studies
- Study of Religion
- Statistical Sciences
- Urban Studies
24 January 2018

Professor Mary Pugh  
Vice-Dean, Undergraduate & International  
Faculty of Arts and Science

Dear Professor Pugh:

I am writing in my capacity as Director of the Cinema Studies Institute to indicate CSI’s support for Woodsworth College's proposed Minor in Digital Humanities.

For now we are happy to have the following course cross-listed for credit in the DH Minor program: CIN214H1: New Media Forms. We are also prepared to consider cross-listing other courses and forging other curricular connections with the DH Minor in the future.

Sincerely,

Corinn Columpar  
Director and Associate Professor  
Cinema Studies Institute  
University of Toronto
Mary Pugh  
Vice-Dean, Undergraduate & International  
Faculty of Arts and Science

30 November 2017

Dear Professor Pugh:

I am writing in my role as Director of the Centre for Medieval Studies to indicate my strong support for Woodsworth College’s proposed Minor in Digital Humanities. CMS has been a partner to Woodsworth College from the outset of this initiative, and is happy to support the emergence of this minor which will provide a valuable means of discipline-specific support to student learning in a range of Humanities fields, including Medieval Studies, English, History, Religion, and many others.

In terms of course listings for the DH minor, CMS offers the following MST courses. These are offered every year, one in the fall term and one in the spring:

**MST201H1F: Getting Medieval: Myths and Monsters**  
**MST202H1S: Getting Medieval: Place and Space**

In addition, CMS is making a hire in Latin Language and Literature this year, which may result in the offering of one additional HCE that could be cross-listed in the DH minor program. We can therefore confirm 1.0 FCE annually, with the possibility of 1.5 FCE, with enrolment priority given to DH minor students. Enrolment for each of these courses (MST201H1F, MST202H1S) is approximately 40 in 2017-18; we hope to expand enrolment numbers in those courses in 2018-19.

CMS has also been a partner in developing the Capstone Research Opportunities in Digital Humanities for undergraduate students, using RA funding to CMS made available through STEP Forward funding (2015-16, for one module; 2016-17, for three modules; 2017-18, for four modules). The Dictionary of Old English has been the research environment for the Capstone Research Opportunities supported by CMS; the 2016-17 modules also included the DECIMA project led by Nick Terpstra (HIS) and the Story Nation project led by Pamela Klassen (REL); the 2017-18 modules include DOE, DECIMA, Story Nation, and the Samizdat project led by Ann Komaromi (COL / VIC).

Going forward, CMS hopes to continue to fund RAships in support of the Capstone Research Opportunities at the Dictionary of Old English, and as many as three projects total: DOE, the Records of Early English Drama, and the Gunda Gunde Ethiopian Manuscripts project. CMS proposes to split the cost of these three RAships, each of which will facilitate elbow learning by two to three undergraduate students, with Woodsworth and FAS, to be negotiated on an annual basis. Through this collaborative model, six to nine undergraduate students annually will have access to a Capstone Research Opportunity within the DH Minor in Digital Humanities.

Best wishes,

Suzanne Conklin Akbari  
Director, Centre for Medieval Studies

Lillian Massey Building, 125 Queen’s Park, 3rd floor, Toronto, Ontario Canada  
Tel: +1 416 978-4884 • Fax: +1 416 978-8294 • medieval.studies@utoronto.ca • medieval.utoronto.ca
Dear Brock,

The Department of Computer Science is excited about the proposed Digital Humanities Minor program. We have discussed reserving spaces in some of our courses (specifically, CSC 104 H1, CSC 108 H1, and CSC 300 H1) for students in the new program, and this will be possible starting as early as Fall 2018.

In addition, we look forward to the opportunities for joint pedagogical development afforded by this collaboration. For example, the creation of short, focused “modules” that can be integrated within existing courses to teach students specific computing skills; and mechanisms to streamline the integration of undergraduate students from Computer Science and Digital Humanities as research assistants in projects from other units.

Regards,

François Pitt
Associate Professor, Teaching Stream &
Associate Chair, Undergraduate Studies

11 January 2018
14 December 2017

Professor Mary Pugh
Vice-Dean, Undergraduate & International
Faculty of Arts and Science

Dear Professor Pugh:

I am writing in my role as Chair of the Department of English to indicate my support for Woodsworth College’s proposed Minor in Digital Humanities.

In terms of course listings for the DH Minor, English offers and will continue to offer the following course at least once per year, and often twice (once in the Fall/Winter session and once in the Summer):

ENG287H1: The Digital Text

Enrollment for this course is capped at approximately 120 in the F/W session and 50 in the Summer. We are happy to allocate 10 spaces in F/W and 5 in Summer for priority enrolment to students in the DH Minor.

The Department of English currently has only one permanent faculty member on staff to teach ENG287H1, and no other current offerings with a digital humanities emphasis. We cannot, therefore, at this time contribute to the Capstone Research Opportunities element of the proposed minor. The use and development of digital tools for textual analysis and literary interpretation is an increasingly important part of English studies; the Department of English will welcome future opportunities to collaborate with the DH Minor which arise out of doctoral research or additions to the faculty complement.

Best wishes,

[Signature]

Paul Stevens
Professor and Chair
Dear Professor Pugh:

I'm writing in my role as the Undergraduate Director, Associate Chair, in the Department of Geography and Planning to indicate my support for Woodsworth College's proposed Minor in Digital Humanities.

We are happy to have the following GGR courses cross-listed for credit in the Digital Humanities Minor program:

- GGR271H1    Social Research Methods
- GGR272H1    Geographic Information and Mapping I
- GGR273H1    Geographic Information and Mapping II
- GGR349H1    Managing Urban Natures
- GGR452H1    Space, Power, Geography: Understanding Spatiality

While we cannot offer priority enrolment to non-Geography students in these courses, there is usually room enough in them to ensure that students taking the Digital Humanities Minor will find places.

Please don’t hesitate to get in touch if you have questions.

Sincerely,

Professor Robert Lewis,
Undergraduate Director, Associate Chair
Department of Geography

Tel: 416-978-1590; Email: lewis@geog.utoronto.ca
19 December 2017

Dear Brock,

Thank you for circulating the proposal for the Digital Humanities Minor that Woodsworth College is organizing and proposing. I think that it is an excellent initiative, and one that we in History can fully support. We have a number of courses in the Digital Humanities already, and a few of our faculty also have Digital Humanities research projects on the go.

History would be very happy to be further involved in the promotion and delivery of the Digital Humanities Minor program, and we would certainly encourage our students to consider it.

Please let me know if there is anything further that I can do to support you in this.

Sincerely,

Nicholas Terpstra
Professor & Chair
January 18, 2018

Dear Professor Pugh:

I'm writing in my role as the Director of Undergraduate Studies of the Institute for the History and Philosophy of Science and Technology to indicate my support for Woodsworth College's proposed Minor in Digital Humanities.

We are happy to have the following HPS courses cross-listed for credit in the DH Minor program:

- HPS202H1  Technology in the Modern World
- HPS203H1  Making Sense of Uncertainty

Your Sincerely,

Joseph Berkovitz

IHPST
Director of Undergraduate Studies
November 22, 2016

W. Brock MacDonald
Vice-Principal, Woodsworth College
University of Toronto

Dear Brock:

This is to confirm permission to cross-list MUS courses as discussed in our meeting yesterday. Specifically, the following cross-listings:

(a) For the Digital Humanities Minor:
   - MUS300H Music, Media, Technology

(b) For the Popular Culture Studies Minor:
   - MUS211H The World of Popular Music
   - MUS300H Music, Media, and Technology
   - MUS306H Popular Music in North America

In addition, I will let you know when we next plan to offer MUS300H, since that course might overlap somewhat with the 199 seminar offered at Woodsworth.

Your proposed minors sound like excellent initiatives, and I wish you the best for their approval and implementation.

Best regards,

[Signature]

Ryan McClelland, PhD
Acting Dean and Professor, Music Theory
Associate Dean, Academic & Student Affairs
ryan.mcclelland@utoronto.ca
416-978-3761
Tuesday, January 23, 2018

Dear Brock

Thanks for organizing the DH Minor at Woodsworth College. I think that this is a great initiative, and Religion is happy to be part of it.

I’ve inquired of the most likely suspects in Religion, and there is considerable support for it.

Specifically, the following courses either have, or have had, or can have DH content:

RLG307H1-S Museums and Material Religion

RLG308H1-S Religion and the City

RLG233H1F Religion and Popular Culture

Additionally, Jennifer Harris is discussing with our Associate Chair the possibility of creating a 100 level course entitled the “Routes of Religion” which looks at the circulation of people, texts, and material culture, which would be ideal for a DH component.

Amanda Goodman is already involved in a project that involves the digital editing of texts (program at the grad level), which might be rolled out on the undergraduate level.

Other colleagues have suggested a new course called “Digital Religion”, maybe at the 2 or 3rd year level. Its specific content could shift based on who is teaching it, but it would always include critical media theory as well as specific DH techniques (e.g. Coding, GIS, data mining, digital storytelling, etc.)

Sincerely,
John S Kloppenborg
Professor and Chair
Dear Professor Pugh:

I'm writing in my role as Principal of St. Michael's College and Director of our Book and Media Studies program to indicate my support for Woodsworth College's proposed Minor in Digital Humanities. The proposed program complements our Book and Media Studies program in several important respects, so we welcome the opportunity to coordinate the two programs, continuing the conversations we've already had with Woodsworth.

We are happy to have the following Book and Media Studies courses cross-listed for credit in the DH Minor program:

- SMC228H1 Elements of Material Bibliography and Print Culture
- SMC229H1 Readers and Readerships
- SMC255H1 Critical Approaches to Media
- SMC392H1 Media Identities

We cannot offer priority enrolment in these courses to students not in the BMS program, but will endeavour to ensure students taking the DH Minor can find places in these courses.

We will revisit these cross-listings in future as the DH program develops further and in the context of our own program’s UTQAP Review, which is taking place this academic year. As well, we would be happy to participate in developing undergraduate research opportunities in the Digital Humanities open to students from both BMS and the DH Minor.

Sincerely,

Randy Boyagoda
Principal and Vice-President
University of St Michael's College in the University of Toronto
Professor, English Department
Basilian Chair in Christianity, Arts, and Letters

Office:
Office of the Principal
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January 19, 2018

Professor Mary Pugh  
Vice-Dean, Undergraduate & International  
Faculty of Arts and Science

Dear Professor Pugh:

I'm writing in my role as Associate Chair for Undergraduate Studies in Statistics in the Department of Statistical Sciences to indicate my support for Woodsworth College's proposed new Minor in Digital Humanities. We are excited about the initiation of this new program, which we believe will fill a significant gap in the Faculty's program offerings.

We've been in conversation with Wordsworth since last year about possible ways that Statistical Sciences could play a role in the DH Minor. Rather than adding any STA courses to the program right now, we hope to continue that conversation over the first few years of the new program, to get a better sense of what we could contribute as the needs of the program's students become clearer. This might mean listing STA courses as part of the program, or developing stand-alone instructional models that would be included in DH courses, or participating in the provision of research opportunities for DH students.

Yours sincerely,

Alison Gibbs  
Associate Professor, Teaching Stream  
Associate Chair for Undergraduate Studies in Statistics
January 13, 2018

Professor Mary Pugh
Vice-Dean, Undergraduate & International
Faculty of Arts and Science

Dear Professor Pugh:

I'm writing in my role as Director of the Urban Studies Program at Innis College to indicate my support for Woodsworth College's proposed Minor in Digital Humanities.

We are happy to have the following Urban Studies courses cross-listed for credit in the DH Minor program:

- INI234H - Cities in Popular Culture (10 spaces reserved during priority enrolment period)
- INI235H - A Multidisciplinary Introduction to Urban Studies: Theoretical Foundations of City-Building (10 spaces reserved during priority enrolment period)
- INI333H – Critical Approaches in Urban Studies (3 spaces reserved during priority enrolment period)
- INI432H - Special Topics in Urban Studies: Urban Studio (Summer course) (3 spaces reserved during priority enrolment period)

Furthermore, we can commit to designating **X spots in each course** for students enrolled in the Digital Humanities Minor during the priority enrolment period.

Sincerely,

Shauna Brail
University of Toronto
Director, Urban Studies Program & Associate Professor, Teaching Stream
2 Sussex Avenue
Toronto, ON M5S 1J5
e: shauna_brail@utoronto.ca
p: 416.978.7463 or 416.978.0965

cc: Brock McDonald, Vice-Principal Woodsworth College;
Tony Pi, Urban Studies Program Assistant
Appendix 4: Survey of Digital Humanities Programs in North America

Abstract

The data in this survey was collected from March 2016 to March 2017. It is exploratory rather than definitive -- an environmental scan across a diverse higher educational landscape, and a collection of empirical data to support curriculum building for the proposed Digital Humanities (DH) minor. It surveys DH undergraduate and graduate teaching initiatives at institutions across North America.

Methodology

Using institutional websites, we surveyed approximately 30 institutions -- selected from among institutions known for strong DH scholarship and teaching, institutions whose DH research activity appears in centerNet (https://dhcenternet.org/centers: an international network of DH centers), or known via professional DH organizations such as ADHO, HASTAC, or the DHSI training network.

We examined which of these institutions offer DH or very similar formal curricular undergraduate programs -- that is, not only isolated "Intro to DH" undergraduate courses, but an official Digital Humanities curriculum. Within this survey, I focused on the departmental affiliation of DH minors; the structure and description of these programs; and the way these programs administratively resolve the question: how do we teach, at the undergraduate level, a highly interdisciplinary field of research, while both conveying a structured, coherent curriculum, and also allowing students to experience the interdisciplinarity of DH?

The data on US institutions benefitted from advice and contributions by Dr. Ece Turnator, Humanities and Digital Scholarship Librarian at MIT (https://libguides.mit.edu/profiles/turnator). The survey of Canadian institutions is my own--the collection of data as well as any errors along the way.

Preliminary Conclusions

Digital Humanities (DH) is an emerging discipline at the intersections of the humanities with computing. DH studies human culture through computational tools and methodologies; and, in turn, DH also studies digital tools, methodologies, and communities through humanist lenses.

DH is entering undergraduate curricula across North America: Among Canada's top 10 universities, UofT and UBC are the only ones still without a formal DH program (compared to McGill University, McMaster University, Queens University, University of Alberta, University of Calgary, University of Montreal, University of Western Ontario, Waterloo, and the DH Summer Institute at University of Victoria, BC). Among Ontario's major institutions, UoFt is the only one without a formal DH program, either graduate or
undergraduate (compared to Carleton University, McMaster University, University of Ottawa, University of Western Ontario, and University of Guelph).

**Institutional Affiliation**

In a few institutions surveyed, Digital Humanities programs have strong ties, explicit or implicit, to the English department (Stanford University; University of California, Santa Barbara; University of Waterloo; Carleton University). However, in most institutions surveyed, Digital Humanities is explicitly affiliated with the Faculty of Arts; the Faculty of Arts and Sciences; the College of Arts and Letters; Faculty of Arts & Sciences, Modern Languages & Literatures; or the School of Arts and Sciences.

**Program Structure**

DH minors across surveyed institutions display striking uniformity in their curriculum. According to course calendars, department websites, and syllabi, DH minors are structured as follows:

**Introduction:** An introduction to DH (an H course, two H courses, or a Y course), often a combination of lectures with hands-on workshops, in which students learn the intellectual contours of the discipline, while also experimenting with code, digital tools, and datasets.

Several elective courses from a suite of affiliated disciplines. These elective courses have a digital aspect or component. With the exception of the University of Waterloo—whose DH undergraduate program is a specialization offered within the English degree—all DH minor programs have a substantial offering of cross-listed courses from other disciplines and departments: Anthropology; Art; Cinema; Communications; Computer Programming; Computer Science; East Asian Languages and Cultures; English; French; History; Italian; Linguistics; Music; New Media Studies; Philosophy; Religious Studies.

A capstone course where students create a major digital project.

The curriculum of DH minors covers: close and distant reading, text analysis and mark-up, data mining, network analysis, visualization, modeling, geospatial analysis and mapping, multi-media storytelling, and information and interface design. The curriculum of DH minors also covers the epistemological, ethical, and theoretical implications of digital media.

DH courses are taught by faculty, DH scholarship centre staff, and librarians – often in collaboration.

**Sample Survey Data**

Please find below a sample of our survey data, focusing on undergraduate education only, and chosen for the clarity with which their DH curriculum is articulated.
<table>
<thead>
<tr>
<th>INSTITUTION</th>
<th>COUNTRY</th>
<th>DEPT. AFFILIATION</th>
<th>STRUCTURE &amp; DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carleton University, Ontario</td>
<td>CANADA</td>
<td>Department of English Language and Literature, in the Faculty of Arts and Social Sciences</td>
<td>2 mandatory DH courses (Introduction to Digital Humanities, Theory and Method), 1 DH-inflected crosslisted course (English, History, Sociology), an elective half-course, a higher-level DH course (e.g. Digital Cultures and the Text), and DH capstone course (<a href="http://bit.ly/2bvHuLi">http://bit.ly/2bvHuLi</a>).</td>
</tr>
<tr>
<td>McGill University</td>
<td>CANADA</td>
<td></td>
<td>McGill has no DH undergraduate program as such, but it does have numerous courses that are either DH or DH-inflected. McGill has a DH M.A. and is currently working on an undergraduate DH minor.</td>
</tr>
<tr>
<td>McMaster University</td>
<td>CANADA</td>
<td>HUMAN 2DH3 - Intro To Digital Humanities (<a href="http://goo.gl/zLGKlQ">http://goo.gl/zLGKlQ</a>)</td>
<td>McMaster has no DH undergraduate program as such; however, see Communication Studies program (<a href="http://goo.gl/VvAv5f">http://goo.gl/VvAv5f</a>)</td>
</tr>
<tr>
<td>Queens University, Ontario</td>
<td>CANADA</td>
<td>Computing &amp; the Creative Arts, within Computer Science.</td>
<td>Computing &amp; the Creative Arts, within Computer Science. Additionally: BISC Field School in Digital Humanities (5 week summer program, All courses offered in the Upper Year Program at the Bader International Study Centre are accredited by Queen's University. Each course is comprised of at least 36 learning hours, including course-specific field study excursions: <a href="http://www.queensu.ca/bisc/academics/programs/upper-year/specialized-programs-2014/digital-humanities">http://www.queensu.ca/bisc/academics/programs/upper-year/specialized-programs-2014/digital-humanities</a>). Majority: comp sci courses. Electives from Architecture, Film, Drama -- not English or History.</td>
</tr>
<tr>
<td>University of Ottawa</td>
<td>CANADA</td>
<td>Faculty of Arts (Digital Humanities listed in calendar as its own discipline, a multidisciplinary program in the Faculty of Arts)</td>
<td>Three mandatory DH courses (introduction to DH, practical applications, and capstone) + 6 electives from disciplines such as Art, Cinema, New Media Studies, English, Information Technology (a.k.a. Computer Science), Philosophy, etc.)</td>
</tr>
<tr>
<td>INSTITUTION</td>
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<td>DEPT. AFFILIATION</td>
<td>STRUCTURE &amp; DESCRIPTION</td>
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<tr>
<td>University of Victoria, British</td>
<td>CANADA</td>
<td>Faculty of Arts (Digital Humanities listed in calendar as</td>
<td>5 DHUM undergraduate courses.</td>
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<tr>
<td>Columbia</td>
<td></td>
<td>its own program, BUT no clear indication if it is a</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>major/minor/other: <a href="http://goo.gl/kyZYhE">http://goo.gl/kyZYhE</a>)</td>
<td></td>
</tr>
<tr>
<td>University of Waterloo, Ontario</td>
<td>CANADA</td>
<td>English, Faculty of Arts</td>
<td>Digital Media Studies Specialization within English (<a href="http://ugradcalendar.uwaterloo.ca/page/ARTS-Specializations-in-English">http://ugradcalendar.uwaterloo.ca/page/ARTS-Specializations-in-English</a>):</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Introduction to Digital Media Studies; two English electives from a list of courses</td>
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<tr>
<td></td>
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<td></td>
<td>focusing on digital media (e.g. Game Studies; Information Design; Visual Rhetoric; Digital</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Design Research Project); one English elective from a list of courses focusing on</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>practices and platforms.</td>
</tr>
<tr>
<td>University of Western Ontario</td>
<td>CANADA</td>
<td>Digital Humanities program--Faculty of Arts &amp; Sciences,</td>
<td>Computing and Informatics for the Humanities as introduction to DH; DH courses on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modern Languages &amp; Literatures</td>
<td>history, fashion, social networking, data &amp; data analytics and visualization</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="https://goo.gl/tZp33x">https://goo.gl/tZp33x</a></td>
<td></td>
</tr>
<tr>
<td>York University</td>
<td>CANADA</td>
<td>DH is not a program in itself, but many DH or DH-inflected</td>
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<tr>
<td></td>
<td></td>
<td>courses appear in its Humanities undergrad program.</td>
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<tr>
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<td>DEPT. AFFILIATION</td>
<td>STRUCTURE &amp; DESCRIPTION</td>
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<tr>
<td>Michigan State University</td>
<td>USA</td>
<td>Digital Humanities program in the College of Arts and Letters</td>
<td>Minor in Digital Humanities administered from the College of Arts and Letters. 5 courses (2 required, 2-3 elective courses) and a capstone project. The minor program is run by Kristen Mapes, the Digital Humanities Specialist at the Dean’s Office’s Computing and Technology Unit. <a href="http://dh.cal.msu.edu/undergraduate-curriculum/digital-humanities-minor/">http://dh.cal.msu.edu/undergraduate-curriculum/digital-humanities-minor/</a></td>
</tr>
<tr>
<td>Stanford</td>
<td>USA</td>
<td>Not explicit. Program directors from English and Linguistics; cross-listed courses from allied disciplines.</td>
<td>Stanford launched their minor in DH in 2015. The program has three clusters (Spatial Humanities, Quantitative Textual Analysis and Text Technologies). Students have to complete 9 courses to complete this Minor. Faculty program directors are Elaine Treharne (English); Sarah Ogilvie (Linguistics; Digital Humanities Coordinator at CESTA and the Stanford Humanities Center). Other directors from history and DH. Support from Stanford Literary Lab, CESTA. Each cluster has its own 101 course.</td>
</tr>
<tr>
<td>UCLA</td>
<td>USA</td>
<td>DH Dept.: DH at UCLA is interdisciplinary (faculty from over 20 departments) &amp; supported by 6 core Centers and Institutes including the Center for Digital Humanities, Academic Technology Services, the Experiential Technologies Center, the Institute for Digital Research and Education, the UCLA Library, and the Ahamanson Laboratory for Digital Cultural Heritage.</td>
<td>Undergraduate minor. &quot;Students in the DH program learn about text analysis, data mining, visualization, modeling and simulation, geospatial analysis and mapping, multi-media storytelling, information design, network analysis, interface design, and mark-up, and they also receive the training they need to apply these tools to humanistic questions.&quot; Students have to complete 7 courses from a select list of over 50 upper-division and 16 lower division approved courses, one of which is a capstone class. (<a href="http://www.edh.ucla.edu/curriculum/courses/">http://www.edh.ucla.edu/curriculum/courses/</a>)</td>
</tr>
</tbody>
</table>
INSTITUTION | COUNTRY | DEPT. AFFILIATION | STRUCTURE & DESCRIPTION
--- | --- | --- | ---
University of Pennsylvania | USA | School of Arts and Sciences at the University of Pennsylvania | "The Undergraduate Minor in Digital Humanities is offered by the School of Arts and Sciences at the University of Pennsylvania. It has been designed for students who want to augment their disciplinary studies in the humanities or humanistic social sciences with advanced digital research techniques and in-depth engagement with theoretical and practical questions raised by digital humanities. Students who are not majoring in humanities fields are also welcome to complete the minor. […] The minor brings] together coursework from across the university and […] draws on faculty from the various departments of the School of Arts and Sciences as well as other schools of the University and encourages students to enroll in courses outside of their major. Students minoring in digital humanities will have the opportunity to learn valuable programing and data management skills, to explore topics such as digital text analysis, digital mapping, 3D modeling, and the use of digital tools for collecting, organizing and studying material culture. Course work will also expose students to debates within digital humanities and require them to attend lectures, workshops and other relevant events at UPenn and around Philadelphia.” ([https://pricelab.sas.upenn.edu/education/digital-humanities-minor](https://pricelab.sas.upenn.edu/education/digital-humanities-minor))

**Further Research**

After completing the survey, I became aware (in August 2017) of a study conducted by Chris Alen Sula, Sarah Hackney, and Phillip Cunningham, who survey a wider range of institutions, compile adjacent data, and suggest similar conclusions.


Visualization:  [https://public.tableau.com/profile/chrisalensula#!/vizhome/DHPrograms_0/Combined](https://public.tableau.com/profile/chrisalensula#!/vizhome/DHPrograms_0/Combined) (see especially the “List of Programs” and “Growth of Programs” tabs).

**Bibliography**

Available upon request.