This course is the product of a simple realization: computation is presenting people – you, me and, well, pretty well everyone – with new ways to express themselves. These new methods I call “expressive instruments.” There is nothing particularly difficult about the idea of the expressive instrument. A letter is an expressive instrument. A number is an expressive instrument. So are the things that are generated by computers, like audio files, 2D animations and 3D models that move. Users often turn to computer created expressive instruments because they are easier and more efficient to generate than alternates created by different instruments, such as the typewriter or pen. For our purposes, they are important for two reasons. The first is that computer-generated expressive forms have led to the creation of something new: new platforms. The term “platform” is an easy idea to grasp too. It is simply a container that houses content. By that measure, a book is a platform. It houses content in the form of letters and numbers. Books, however, are not designed to house digital objects produced by computers, and so computer scientists, digital humanists and others have been busy working over the past two decades to design new
platforms to house them. These platforms are known by many names, but for our purposes we will call them Virtual Worlds. Digital expressive instruments are also important to us because they – and Virtual Worlds – are having an impact on how historians express the past, analyze/interpret the past, and teach the past. The purpose of this course is to learn how.

**Required Software and Equipment:**

You will not need to purchase textbooks for this course. We will, however, be using the 3D modeling software package known as *SketchUp*. Copies of *SketchUp Pro* will be available on class computers in TH 269J (and available for use outside of class and lab hours when no other classes are in session). Individuals who wish to use their own computers in class are required to use *SketchUp Pro*, to facilitate export of models to other programs. The software can be procured at a student rate.

To download the software, go to:

http://www.sketchup.com/

To purchase a student license from an education vendor, go to:

http://www.sketchup.com/buy/edu-resellers

[Note: there are two education re-sellers for Canada, one in France, the other in California. You’ll need to provide proof of registration, and it likely will be easier to deal with the US vendor than the French one].

You will also need a USB memory stick to save your 3D model, and a Google Drive account

**Assignments and Evaluation:**

The final mark for this course is based on successful completion of:

- Three Written Papers: (2 x 15) (1 x 25) = 55%
- One Oral PowerPoint presentation (20 minute) based on your second essay: (1 x 10) = 10%
- One Take Home Final (1 x 15) = 15%
- Two 3D Models (1 x 5) (1 x 15) = 20%

**Papers:**

Written assignments for the first and second papers are to be the individual
work of each student. No collaboration is permitted in the research or composition of the first two written papers for this course.

The same rule applies for the Oral PowerPoint presentation. The research, composition and presentation of the assignment are to be the product of your work, and your work alone.

Students can and will collaborate in the production of the third and final paper for this course, and the two 3D models that are submitted with it.

**Paper One: (15%)**

**The first paper will be due at the start of class, October 5, 2012.**

It should be 10 pages.

*(Please note that your paper should be 10 pages of written text, double spaced. The title page, endnotes and bibliography are not counted as part of the 10 pages you are required to submit).*

Your assignment for this paper will be to write a literature review.

A literature review is different from a standard history essay. In most history essays, your job is to concentrate on history, to provide an argument indicating why a given event in history occurred. In a literature review, your job is to describe the historiography, to report on the past and present state of any given field of historical inquiry. Typically, literature reviews report on two specific things.

- **They focus on what historians are saying** on any given topic or event, such as the decision to use the atomic bomb during World War II. In a paper like that, the author’s job is to report on the various arguments that historians have put forward to explain why the U.S. opted to use nuclear weapons.

- **They report on what historians are doing.** Here, the literature review reports on the state of a given field of history, such as digital history. What types of questions they are exploring? What methods are they employing? What types of evidence are they harnessing?

Your literature review will fall into this second category. Your job will be report on how historians are using computers to support all or some of the following tasks: their research, expression, publication of knowledge, and teaching.
For your paper, titled “Overview of Digital History,” you will be required
to write a paper based on 12 articles from peer-reviewed journals. You
may not use websites unless I have specifically assigned them to you. 7 of
those articles should be selected from the sources listed below.

The remaining 5 articles you will locate yourself.

These articles should be on the field of digital history, and must have been
published no earlier than 2013.

- **Topic:** Overview of Digital History

    History: The Changing Face of the Profession in Britain*. Website
    at: [http://www.history.ac.uk/makinghistory/resources/articles/history_and_computing.html](http://www.history.ac.uk/makinghistory/resources/articles/history_and_computing.html) [September 7, 2015].

  - Kristen Nawrotzki and Jack Dougherty, “Writing History in
    the Digital Age” (Ann Arbor, MI: University of Michigan
    Press, 2013) at *Digital Culture Books Website*. [Use any
    papers listed].
    [http://dx.doi.org/10.3998/dh.12230987.0001.001](http://dx.doi.org/10.3998/dh.12230987.0001.001)
    [September 7, 2015].

  - “Intersections: History and New Media” at *Perspectives
    Online Website*. [Use any papers listed in “Intersections:
    History and New Media” section].
    [September 7, 2015].

  - “Essays on History and New Media” at *Center for History
    and New Media Website*. [Use papers in the “Overviews”
    [September 7, 2015].

  - “Essays” at *Digital History Website*. [Use any papers
    listed]. [http://digitalhistory.unl.edu/essays.php](http://digitalhistory.unl.edu/essays.php)
    [September 7, 2015].
Take Home Final: (15%)

The Take Home Final is due the last day of class, Fall Term: December 7, 2015.

It should be a 10 page type-written paper based on fall lectures. The purpose of this assignment is to summarize materials derived from three lectures given during the fall semester. On November 23rd, I will announce the specific question and lectures that you will use as the basis for the take home final.

To do well in this assignment, you will obviously need to make sure you attend all lectures. You will also need to take detailed notes so that you have the materials you need to write a good paper.

Paper Two: (15%)

The second paper of the course will be due at the start of class, February 8, 2016.

It should be 10 pages.

(Please note that your paper should be 10 pages of written text, double spaced. The title page, endnotes and bibliography are not counted as part of the 10 pages you are required to submit).

You will again write a literature review, based on one of two topics

- **Topic One:** History and Computer Games – Digital history, by its nature, requires historians to keep track of multiple literatures outside of history proper, including those that relate to the use of computing to support research and education. Recently, researchers in education have been devoting increasing attention to the role that computer games can play to support education at all levels. Some of that discourse has been devoted to the field of history.

  Write an essay using 12 sources (books or articles from peer reviewed journals) that discuss the role that computers can play to support education in general and historical instruction in particular.

  For this paper, you must use the two resources listed below. You will need to locate the remaining 10 books or articles yourself. If you choose this paper, you must submit a bibliography of proposed sources to me before you begin reading and composing your paper, to ensure that the materials come from reputable scholarly publications.
You must use recent sources in your paper. All sources in your paper – save for the two listed below – must have been published no earlier than 2012.

  
  [http://website.education.wisc.edu/kdsquire/REPLAYING_HISTORY.doc](http://website.education.wisc.edu/kdsquire/REPLAYING_HISTORY.doc)


**Topic Two:** Counterfactuals and History – Counterfactuals are scenarios that are created by historians and other researchers concerned with the past. Their purpose is to explore the “what-ifs” of history, history as it might have plausibly occurred, but did not. For example, some scholars wonder how World War II might have ended if the U.S. had opted not to use the atomic bomb. Other scholars wonder if the British Empire might have survived if Britain had opted not to enter the First World War.

As a general rule, historians have avoided counterfactuals. The general view has been that it is hard enough to reconstruct the past as it actually occurred without delving into history as it might have been. That attitude, however, has recently begun to change. A growing number of historians feel that exploring counterfactual histories can be a useful exercise, because:

- They can assist historians in determining which of an array of potential causes was the most important in causing a historic event to occur.
- They enable historians to determine why a given historic event mattered. How might history have unfolded, for example, if the atomic bomb had not been used? Would more people have died? Would fewer individuals, combatants and non-combatants, have died? The answer you reach on that question will often determine your determination of the atom bomb’s place in history, and whether it was a defensible thing to use.

From the standpoint of this course, counterfactuals are of interest because agent-based simulations are likely to emerge as the instrument that historians use to construct counterfactuals. The purpose of this essay, therefore, is two-fold:

- To determine why some historians now believe counterfactuals can be useful instruments to interpret the past;
To determine why agent-based simulations will be useful instruments to support counterfactual analyses.

For this paper you will use 12 sources (articles or books).

Use the Hawthorn book listed below.

Also use the two edited collections listed below. You may use a total of six articles from these two works.

You must find the remaining five peer-reviewed journal articles yourself. They should relate to the use of agent-based modeling to support history or related historical fields such as history and anthropology.

You may not use readings from this course as part of this paper.

You must obtain approval from me for the list of articles you compile prior to writing your essay.


**Oral Power Point Presentation: (10%)**

Each student is required to make one 20 minute oral Power Point presentation describing the research they conducted for their second paper.

These presentations will take place during the final four sessions of the course, starting March 12, 2015.

The PowerPoint presentation must be submitted to the instructor after the presentation has been made.

Your mark here will be based on the quality of your presentation and reception.
By quality I mean the following:

- You will be summarizing the contents of your 10 page paper, and your mark will be based in part on your creation of a successful summary, and clear communication of it.

- Your mark will also be based on your style of presentation. The key to good public speaking is to engage your audience, and that means looking directly at your audience and speaking in a manner that is conversational and clear. It does not mean reading your words verbatim from a piece of paper or from your PowerPoint slides. If you do the latter, your mark will be lower. If you do the former, you will get a better mark.

- Your reception of your colleagues PowerPoint presentations. I will be looking to see which individuals ask questions, and the quality of their questions.

During Spring Reading Week, I will assign each student a date for his or her presentation.

**Two 3D Models (20%)**

You are required to submit two 3D models of historic structures that were situated in downtown St. Catharines. You will work in teams to construct the 3D model which you will submit with your final third paper. In this course, you will be provided with instructions regarding the interpretation of primary sources – specifically fire insurance maps and photographs, and the use of the 3D modeling software during seminar. Your mark for this section will be based on:

- Submission of two partial or completed 3D models at the end of the course (5%).
  
  You will receive full marks for completed models, and partial marks for partially completed models.

- Participation in both the archival work and software work required to generate the two models (15%).

  In your paper, I will expect a report on each partner’s contribution to both aspects of the project.

  The purpose of this exercise is to give you experience both in undertaking primary research in an archive and the digital re-construction of a heritage building, so there will be no specialization in this project, with one person doing the 3D modeling, and another doing the archival research.

  I will also take into account teamwork displayed by members of each research team. Be cooperative. Be collegial.
Paper Three: (25%)

Your third and final paper will be due April 2, 2015.

It will be 20 pages of written work, plus your title page, endnotes and bibliography.

For this assignment, you will pair up with another member of the class, and the two of you together will be responsible for doing two things:

- Generating two 3D models of buildings situated here in St. Catharines;
- Submitting an essay that describes the history of each building between 1873 and 1914.

For this assignment, you will be marked on three things:

- **Creation and adherence to a work plan (7.5 %)** – To complete this assignment, you will need to make a work plan, and stick to it. You will need to determine what local repositories you will visit, such as the St. Catharines Museum, and when you will visit them. I will expect constant reports over the course of the winter semester apprising me of your progress. My receipt of a work plan at the start of winter semester, and receipt of reports in association with each benchmark, will form the basis of this portion of your mark.

- **Description of method used to construct your 2 3D models (7.5 %)** – The first 10 pages of your essay will be devoted to the two 3D models you submit with your essay. Your job will be to describe in detail the assumptions and steps you took to create each model. You will further be required to provide documentation, i.e. to show me the primary sources you used to create the two models. I will want an account of every step you took to generate the model you present in conjunction with your paper.

- **Analysis that places the two modeled buildings in context (10%)** – In the final 10 pages of your assignment, you will need to provide an account of the building’s history. Here you will need to provide an account of each structure’s history, indicating when it was built, and providing the names of the residents or businesses associated with the structure between 1873 and 1914. You will also be responsible for tying the building to a historical context or set of contexts. You will have wide latitude here. The context could be a significant person. It could be a significant event such as the Long Depression. It could be a domain of commercial activity such as Dry Goods or Music. Or it could be something else if your sources point in that direction.

As is the case with any essay, your mark for this and all essays will also be based on your meeting the core requirements for any good expository essay: good argumentation, grammar and documentation of your primary and secondary sources.
Deadlines:

Deadlines are firm. In rare circumstances, I will grant an extension, but it must be requested at a minimum the day before the paper is due. If you were unable to submit the paper on time due to illness, you will need to submit a note from your physician indicating that you were sick.

Otherwise, papers submitted after deadlines will receive a 5% reduction in mark for every day that they are late.

Format and Documentation:

Papers presented in this course should be double-spaced, with 12 point Times Roman font.

Margins should follow the normal format of Microsoft Word, with 1” margins on the top, bottom, right and left of your text.

The pages of your essays should be numbered, and the numbering should be situated on the bottom of each page.

Your paper should have a title page indicating the title of your paper, your name, the number for this course (HIS 3F31), my name as your professor, the name of the university, and date of submission.

Students are required to provide proper documentation with their written assignments. If you use content, you are obliged to identify for your readership – which in this case is me – the source of your content, via endnotes.

Use endnotes. Do NOT use footnotes.

All works cited should be listed in a bibliography at the end of your paper.

And all works cited should be properly documented via the Chicago/Turabian format. Parenthetical forms of documentation are not accepted in this course. Those who either need to learn or brush up on this style of documentation can consult “The Writing Center” website online:

Plagiarism will not be tolerated. The complete definition of plagiarism is located in the *Brock University 2015/16 Undergraduate Calendar*. Important points from that definition include:

- Submission of an essay written in whole or in part by someone else as one’s own.
- Preparing an essay or assignment for submission by another student
- Copying an essay or assignment, or allowing one’s essay or assignment to be copied by someone else.
- Using direct quotations or larger sections of paraphrased material without acknowledgement.

Students caught plagiarizing or cheating will be subject to penalties outlined in the university calendar.

It is assumed that by the time students reach a third year level course that they know proper standards for documentation.

If you have any questions regarding documentation and proper scholarly practice, please do not make the mistake of assuming that a given practice will be acceptable to me or the university. Ask me. I’ll either answer you right away, or retrieve an answer from the university.

All submitted essays are subject to computerized methods of plagiarism detection such as turnitin.com.

**Course Schedule:**

**September 14:** Course Introduction – Introduction to Course

**September 21:** Guest Lectures – Research in Local Repositories

**Lab:** *Introduction to SketchUp; Project Selection*

**September 28:** Historiography I

**Lab:** *Introduction to SketchUp*

**Work Plan One Due [Text and Calendar]*
October 5: Historiography II

Lab: Use of Fire Insurance Plans, Photographs

October 12: Reading Week

October 19: Introduction to Digital History

Lab: Begin Project One

October 26: Data Mining, Text Mining and Quantitative History

Lab: Project Work
Work Plan Two Due [Text and Calendar]

November 2: Historical G.I.S. I

Lab: Project Work

November 9: Historical G.I.S. II

Lab: Project Work
Project Report One Due

November 16: The Science of Complexity and Emergent Change

Lab: Project Work
November 23: Visualization, Agent-Based Modeling and Historical Change I

**Lab:** *Project Work*
Project Report Two Due

November 30: Visualization, Agent-Based Modeling and Historical Change II

**Lab:** *Project Work*

December 7: Constructivist Learning, Computing and History

**Lab:** *Project Work*
Conclusion Project One – Final Work Report Due

December 14, 21, 28: Exams and Christmas Break

January 4: New Platforms, New Repositories for History: 3D Virtual Worlds, Cyberinfrastructure, Grid Computing and High-Performance Computing

**Lab:** *Begin Project Two*
January 11: New Platforms, Ne History: 3D Virtual Cyberinfrastructure High-Performance Lab: Project Work Work Plan One Due [ ]

January 15: Last Day to Withdraw from Course without Academic Penalty

January 18: History and Comp Lab: Project Work

January 25: History and Comp Lab: Project Work

February 1: Computing and A Lab: Project Work Work Plan Two Due [ ]

February 8: Computing and A Lab: Project Work

February 15: Reading Week

February 22: Virtual Heritage at Sciences Lab: Project Work Project Report One Due [ ]