Course Description:

A medical technology can be anything from a tongue depressor to dialysis equipment, from infusion pumps to surgical tools, and from an electronic patient record to imaging technologies and artificial intelligence (AI). To what extent has the work of healing and an individual’s medical experience been shaped by technology? How have new instruments, machines, and systems been introduced and adopted (or rejected) in medicine over the past two centuries? How has technology disrupted (or not) medical knowledge and practice? While some scholars herald the benefits of medical technology, such as improved hospital and administrative productivity or greater insights into disease and medical treatment, other scholars suggest that the reign of technology in medicine is to the detriment of patients, doctors, and society in general.

This seminar examines the role of technology in medicine and its impact on medical practice, medical institutions, health care professionals, patients, and society at large. This seminar will explore the ways in which medical technology has shaped, and in turn been shaped by, scientific, political, economic, and sociocultural forces. Through weekly topics, students will investigate key episodes in the history of medicine and technology that resulted in “tacit skill” and “tacit knowledge” production and its translation (adoption or rejection) into diagnostic and therapeutic medical practice. Themes of agency and “ways of knowing,” issues of race, gender, class, and disability, as well as the role of health care politics, economics, professional authority, patient advocacy, consumerism, and more will be discussed. Students will engage with a variety of primary sources throughout this course and be exposed to material culture theory and methodology (through the handling of objects from Western’s Medical Artifact Collection).

Methods of Evaluation:

Workshop Assignment: Object-inspired Teaching …………………………. 10 % Due: Mar 8
(5 pages max.)

Research Essay Outline or “The Frame” (Professor & peer feedback) ……… 10 % Due: Feb 15
(one slide / 5 min. presentation)
Research Essay Findings or “The Analysis” (Professor & peer feedback) …… 10 % Due: Apr 5
(one slide / 5 min. presentation)

Research Essay Assignment ......................................................... 40 % Due: Apr 12
(15-20 pages approx.)

Seminar Participation ................................................................. 30 % Due every mtg
- see participation “bucket” below for products/ activities

Written Assignments to be Submitted:

Workshop Assignment: Object-inspired Teaching (5 pages max.) -- design a lesson plan for a 1-hour class session which brings an object perspective to a topic in a larger undergraduate history of medicine course. What object(s) would you spotlight? What readings (secondary and/or primary sources) would you assign? How would you run discussion or student engagement for this session? Be sure to think about what kind of course (topic, level) this lesson is for and include the learning objectives for the session.

Research Essay Assignment (roughly 15-20 pages) -- research and write a history of medicine paper on a topic of your choosing, which includes a technological aspect (at least in part). Your research is expected to include recent scholarships (by leading medical historians) and primary source materials. A semester is short; focus on interrogating your sources and building a (limited) argument.

You will submit your written assignments online via the OWL course site. An electronic copy of your work is required for grading. There is no need to submit a paper copy of your written assignments. On our OWL course site, please upload your written assignments as MS Word documents (no pdf documents please) and use the file name “Last name assignment” (ex. “McKellar workshop assignment” and “McKellar research essay”).

Due Dates, Late Penalties, Missed Seminar Meetings:

Please note the due dates for the two oral presentations and the two written assignments. Students are expected to respect all due dates. Please see the professor with any routine requests for extensions but note that extensions are not granted gratuitously.

The oral presentations are scheduled for Feb 15 and Apr 5, with limited options to reschedule. Please make every effort to present on those dates. The failure to offer a presentation on those days will result in a zero grade for that assessment.

The penalty for late written assignments is 2% each day (including Saturday and Sunday) after the due date. For “non-routine” requests for accommodation (ie. medical or compassionate grounds), students must see the Graduate Chair, who will communicate with the professor thereafter. The final date to submit material for the course is April 30, 2023. All requests for extensions for course work that go beyond the last day of term must be approved by the Graduate Chair. Note that all written assignments must be completed to pass the course.

Missed seminar meetings will make it difficult for students to earn strong seminar participation marks. Please make every effort to attend our seminar meetings, especially the meetings of Feb 15 and Apr 5 for the oral presentations. In calculating the grades for participation in the class discussion of weekly readings, the lowest grade will be excluded. This means that if a student needs to miss one class, this will not be penalized; the grade for this class will be dropped.
**Seminar Participation:**

Seminar participation is mandatory. Student marks are not earned from simply attending our meetings. It is expected that students come to class having read all the weekly reading and prepared to offer comments, ask questions, describe arguments, and make connections between readings. Informed, weekly participation is vital to the success of the seminar. There are various components to your final seminar participation mark, including moderating a meeting, offering peer feedback to student presentations, and effective and relevant comments to contribute to a high-level discussion of weekly materials. Check out the “participation bucket” below and feel free to suggest additional opportunities to add to the bucket!

**Be warned:** If I find that students are NOT demonstrating a close reading of all weekly readings by way of our seminar discussions at class meetings, then students will be asked to submit weekly Reflection Pieces (written essays), in advance of our meeting, as demonstratable work product that students are understanding the assigned readings.

Participation “Bucket” – Products / activities required to earn participation marks:
- Active Participant in every weekly seminar meeting (demonstrate your comprehension of weekly readings, engage with seminar discussion, display active learning)
- Moderator of one weekly seminar meeting
- Presenter of “New Scholarship” at one seminar meeting, which includes a 1-page summary of book contents and its contribution to our weekly discussion (this can be point-form)
- Provider of quality peer feedback on work products of classmates (specifically the student presentations of Essay Outline & Essay Findings)
- Attendee at a HoM activity offered on Western campus (*optional but will earn bonus marks)

**Course Schedule and Readings:**

<table>
<thead>
<tr>
<th>Wk</th>
<th>Topic</th>
<th>Assigned Readings for Seminar Discussion</th>
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</table>
| 1  | **Introduction: Medicine and Technology**<br>Why the focus on technology in a course in the history of medicine? | No assigned reading for this first meeting.  

Jan 11
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Supporting secondary source reading:</td>
</tr>
<tr>
<td>3 Jan</td>
<td>Hospitals</td>
<td>Howell, Joel. <em>Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century</em>. Baltimore, MD: Johns Hopkins University Press, 1995. Ch. 4 “Clinical use of the x-ray machine” and Ch. 5 “The x-ray image: meaning, gender and power” (Note: scan these chapters building on previous week’s discussion of Howell book)</td>
</tr>
</tbody>
</table>

**New Scholarship:**


**X-rays: A Primary Source interrogation**

- Newspaper—*The San Francisco Call*, 18 Feb 1896

Supporting secondary source reading:


* Do imaging technologies make the body “transparent”? – consider the “medical gaze,” the “cultural construct” of the transparent body, the promise and fears of “seeing within,” and more
<table>
<thead>
<tr>
<th>4 Feb</th>
<th>Obstetrics and Gynecology</th>
</tr>
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<tbody>
<tr>
<td>How does gender implicitly and explicitly affect professional authority and patient experiences in the case of some medical technologies?</td>
<td></td>
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</table>


**Forceps: A Primary Source interrogation** –


**New Scholarship:**


<table>
<thead>
<tr>
<th>5 Feb 8</th>
<th><strong>Surgery</strong></th>
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<tbody>
<tr>
<td></td>
<td>How is surgery revered and/or contested as a professional skill? As contributing knowledge? As a curative measure (patient outcome)?</td>
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</table>


- Schlich, Thomas and Chris Crenner, “Technological Change in Surgery: An Introductory Essay” pp 1-20


**Surgical Instruments: A Primary Source interrogation** --


Available on the Internet Archive at: [https://archive.org/details/mechanicsofsurge00truaiala](https://archive.org/details/mechanicsofsurge00truaiala)
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Reading Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 15</td>
<td>Race</td>
<td>1) Readings Discussion &lt;br&gt;How is technology misconstrued or positioned as “neutral”?&lt;br&gt;2) Student Presentations &lt;br&gt;Essay Outline Presentations</td>
</tr>
</tbody>
</table>

**New Scholarship:**


|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**New Scholarship:**


|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
Information, Data, and the Digital Age

How are certain data management and communication technologies adopted (successfully and/or unsuccessfully) within a medical environment?

Due at this meeting:
Workshop Assignment: Object-inspired Teaching


Strehle, E. M. and N. Shabde. “One Hundred Years of Telemedicine: Does this new Technology have a place in Paediatrics?” *Archives of Disease in Childhood* 91 (2006): 956-959.


Ongoing debate (optional reading):


The Electronic Medical Record (EMR): A Primary Source interrogation –

### New Scholarship:


<table>
<thead>
<tr>
<th>9 Mar</th>
<th>(Mis?)Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zanette, Francois. “Curing with Machines.” <em>Technology &amp; Culture</em> 54, 3 (Jul 2013):</td>
</tr>
</tbody>
</table>

### Advertisements/ Popular Culture: A Primary Source interrogation --

- 1920s Advertisements (Uploaded on OWL)
  1. “That Other You Could End Your Marriage!” (Lysol disinfectant)
  2. “A Perfect Wife … until 6 p.m.” (Lysol disinfectant)
  3. “Hands catch Germs” (Kleenex)
  4. “No more nagging to get his hands clean” (Lifebuoy soap)
  5. “What is your baby worth?” (Fly-Tox spray)

Supporting secondary source reading:

<table>
<thead>
<tr>
<th>Date</th>
<th>Category</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 22</td>
<td>Bodies</td>
<td>How does disability influence the adoption of certain medical technologies, notably the aspects of tacit skill and tacit knowledge (or “ways of making and knowing”)</td>
<td>Linker, Beth. “Toward A History of Ableness,” All of Us, The Disability History Association's blog (June 1, 2021). <a href="http://alofusdha.org/research/toward-a-history-of-ableness/">Link</a></td>
</tr>
<tr>
<td></td>
<td>Drugs</td>
<td>How can the framing of drugs as a “therapeutic revolution” in medicine be</td>
<td>Greene, Jeremy A., Flurin Condrau, and Elizabeth Siegel Watkins, editors. Therapeutic Revolutions: Pharmaceuticals and Social Change in the Twentieth Century. Chicago: University of Chicago Press, 2016) – 5 chapters:</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Notes</td>
<td></td>
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</table>
| Mar 29 | contested (or not) in comparison with other medical technologies? | - Introduction “Medicine Made Modern by Medicines”  
- Ch. 1 “Futures and their Uses: Antibiotics and Therapeutic Revolutions” by Scott H. Podolosky and Anne Kveim Lie  
- Ch 2 “Reconceiving the Pill: From Revolutionary Therapeutic to Lifestyle Drug” by Elizabeth Siegel Watkins  
- Ch 6 “Pharmaceutical Geographies: Mapping the Boundaries of the Therapeutic Revolution” by Jeremy A. Greene  
- Ch 11 “A Therapeutic Revolution Revisited” by Charles E. Rosenberg  
| 12 Apr 5 | Wrap Up: Medicine and Technology | No assigned readings.  
1) Student Presentations  
   [Essay Findings](#)  
   [Presentations](#)  
2) Wrap-Up Discussion  
How does our focus of technology in medicine reinforce or disrupt our understanding of medical history? Our conclusions for this seminar? |

**Aspirin: Using Primary Sources to situate (historically) a current debate --**

- “Is the New Aspirin Advice a Medical Flip-Flop, or Just Science?” *New York Times* (22 Oct 2021)

**New Scholarship:**


### Additional Statements

**Accessibility Options:**

You may also wish to contact Accessible Education (formerly known as Services for Students with Disabilities (SSD)) at 661-2111 x 82147 for any specific question regarding an accommodation. See: [Accessible Education - Academic Support & Engagement - Western University (uwo.ca)]

**Request for Accommodations/Medical Issues**

Students are entitled to their privacy and consequently they do not need to disclose personal information to their course professors. In the event that students feel the need to discuss personal information, they should see the graduate chair. Unlike undergraduate students, graduate students cannot be referred to Social Science Academic Counselling to have their medical or non-medical circumstances evaluated and to receive a recommendation for accommodation. Those facilities are for undergraduates only, and there is no process beyond the department to secure recommendations for accommodation. Our process is that faculty should deal with routine requests for extensions. However, a student’s request for accommodation (on medical, non-medical, compassionate grounds) should go to the graduate chair, Prof. Eli Nathans ([enathans@uwo.ca](mailto:enathans@uwo.ca)) who will consult and communicate with faculty. Additionally, faculty and students should communicate with the grad chair about any case in which work is not submitted before grades are due. In the event that the graduate chair is also the course professor, then a request for accommodation can be taken to the department chair.

**Copyright**

Lectures and course materials, including power point presentations, outlines, and similar materials, are protected by copyright. You may take notes and make copies of course materials for your own educational use. You may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, wiki material, and other course materials publicly and/or for commercial purposes without my written consent.

**Plagiarism:**

Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where...
appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offense.

For more information on plagiarism and other scholastic offenses at the graduate level see: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

The following rules pertain to the acknowledgements necessary in academic papers.

A. In using another writer's words, you must both place the words in quotation marks and acknowledge that the words are those of another writer.

You are plagiarizing if you use a sequence of words, a sentence or a paragraph taken from other writers without acknowledging them to be theirs. Acknowledgement is indicated either by (1) mentioning the author and work from which the words are borrowed in the text of your paper; or by (2) placing a footnote number at the end of the quotation in your text, and including a correspondingly numbered footnote at the bottom of the page (or in a separate reference section at the end of your essay). This footnote should indicate author, title of the work, place and date of Publication and page number. Method (2) given above is usually preferable for academic essays because it provides the reader with more information about your sources and leaves your text uncluttered with parenthetical and tangential references. In either case words taken from another author must be enclosed in quotation marks or set off from your text by single spacing and indentation in such a way that they cannot be mistaken for your own words. Note that you cannot avoid indicating quotation simply by changing a word or phrase in a sentence or paragraph which is not your own.

B. In adopting other writer's ideas, you must acknowledge that they are theirs.

You are plagiarizing if you adopt, summarize, or paraphrase other writers' trains of argument, ideas or sequences of ideas without acknowledging their authorship according to the method of acknowledgement given in 'A' above. Since the words are your own, they need not be enclosed in quotation marks. Be certain, however, that the words you use are entirely your own; where you must use words or phrases from your source; these should be enclosed in quotation marks, as in 'A' above.
Clearly, it is possible for you to formulate arguments or ideas independently of another writer who has expounded the same ideas, and whom you have not read. Where you got your ideas is the important consideration here. Do not be afraid to present an argument or idea without acknowledgement to another writer, if you have arrived at it entirely independently. Acknowledge it if you have derived it from a source outside your own thinking on the subject.

In short, use of acknowledgements and, when necessary, quotation marks are necessary to distinguish clearly between what is yours and what is not. Since the rules have been explained to you, if you fail to make this distinction, your instructor very likely will be forced to regard your omission as intentional literary theft. Plagiarism is a serious offence which may result in a student's receiving an 'F' in a course or, in extreme cases, in their suspension from the University.

If a History graduate course professor suspects course work of possible plagiarism, or if a graduate supervisor suspects a cognate or thesis of possible plagiarism, the faculty member will meet with the student. If the issue is not resolved, the student then meets with the graduate chair to discuss this situation, and so that the student can present or respond to evidence. Afterwards the graduate chair will make a decision about whether misconduct has occurred and any penalties; this will be communicated in writing to the student within 3 weeks. The student may appeal this decision to the Vice-Provost (Graduate) within 3 weeks of the issuance of the chair's decision. If the student does not appeal, the Vice-Provost will review the case. The Vice-Provost may confirm, affirm, vary, or overturn the graduate chair's decision or penalty.

Information on the appeals procedures for graduate students can be found here: [http://www.uwo.ca/univsec/pdf/academic_policies/appeals/appealsgrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/appealsgrad.pdf)

**Support Services**

Students who are in emotional/mental distress should refer to Mental Health@Western, [http://uwo.ca/health/mental_wellbeing/](http://uwo.ca/health/mental_wellbeing/) for a complete list of options about how to obtain help.

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority.

- Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. For example, to support physical activity, all students, as part of their registration, receive membership in Western’s Campus Recreation Centre. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page [http://www.music.uwo.ca/](http://www.music.uwo.ca/) and our own McIntosh Gallery [http://www.mcintoshgallery.ca/](http://www.mcintoshgallery.ca/)

- Information regarding health- and wellness-related services available to students may be found at [http://www.health.uwo.ca/](http://www.health.uwo.ca/)

- Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), or
other relevant administrators in their unit. Campus mental health resources may be found at http://www.health.uwo.ca/mental_health/resources.html

UWO has many services and programs that support the personal, physical, social, and academic needs of students, in a confidential environment. The Student Development Centre (SDC) has trained staff and an array of services to help students achieve their personal, academic and professional goals. See: Academic Support & Engagement - Western University (uwo.ca)

If you have any further questions or concerns, please contact, Heidi Van Galen, Department Manager, Department of History, 519-661-2111 x84963 or e-mail vangalen@uwo.ca.