I399/Z544: Gender and Computerization

Required reading:


Articles to be made available on Canvas or on the public Web.

1. Course background and importance

Women are active users of information technology. They outnumber men on social networking sites such as Facebook, Twitter, and Pinterest. Older teen girls are avid users of online technologies that enable them to reinforce existing relationships. While the gender gaps that were still visible a few years ago have narrowed in terms of overall Internet use, information technology (IT)-related fields have yet to undergo a similar change. IT as well as associated disciplines such as mathematics and engineering have been and continue to be male-centric environments. This is not to say that there are not women in computer science, for example. There are. This is also not to say that the IT experience for men is always a positive one. It is not.

However, research suggests that more males than females enroll in and complete computer science courses/programs; and more males than females design, implement, and administer computer networks. In general, females express less interest than males in learning about computer programming. Despite their active use of digital environments, females continue to convey less confidence than their male peers in their technological capabilities. Scholars posit that these and other issues translate into fewer women entering IT careers. The "gender gap" and the "leaky pipeline" are terms that are commonly used to describe the disparity between the number of males and females in IT.

At the same time, today’s technology-focused world is becoming more global, and IT is becoming even more pervasive in the workings of everyday life. When students attend class, technology is typically part of that experience. Patients who visit a physician also encounter technology when their medical history information is entered into a computer system. Even a simple visit to the neighborhood grocery story involves technology. What happens if certain segments of the population are left behind as the technology moves forward?

In order to compete in a global society, it is in the best interest of society as a whole for its citizens to have similar technological access and opportunities. Currently, scholars in IT, education, gender studies, as well as other related areas are working to better understand emerging technologies and how they affect people of all genders. Many of these topics
appear in the popular media and are discussed in non-traditional outlets (blogs, Twitter, YouTube, etc.), as well.

2. **Course description**

This course introduces students to the ways gender and technologies, particularly related to computerization, have been understood. Throughout the semester, we will examine technological studies, gender critiques of technology, and problematic imaginings and representations of gender and technology, as well as ways in which gender has shaped practice and technological developments over time.

More specifically, this course will cover a broad spectrum of topics, including:

- The association of computers with male interests and aptitudes.

- The IT climate in education and in the workplace.

- The nature versus nurture debate (e.g., is being good with computers an innate ability or the result of socialization?)

- The role stereotypes (many perpetuated by the media) play in IT.

- The number of males and females using Internet resources and what the closing of this gap means.

- The attraction to virtual worlds (including digital gaming), and how these carnivalesque environments may close the gender gap.

- Sex and sexuality in technologized environments.

- Gender, artificial intelligence, and robotics.

- The ways in which technology designed by women may serve to close the gender computing gap.

- The impact digital inequality has on males and females alike.

The course is based on readings and critical discussion, and is conducted in a part-lecture, part-discussion format in which opportunities to speak are available to all students in each class session.

3. **Course objectives**

As a result of completing this course, you should gain:
• A better understanding of the role gender plays in shaping computer technology, its
design, and its uses.
• An awareness of gender and IT issues in educational settings and the workplace, as
well as in more playful environments.
• Knowledge of the tactics used to encourage the formation of a more gender diverse
computing environment.
• Insight into the global reach of the gender gap.
• Awareness that equal access alone is not the solution.
• Experience in summarizing, synthesizing, and presenting concepts from published
scholarship.
• Hands-on experience using technologies for discussion and presentation that may be
new to you.
• The ability to analyze and critique images, reports, and portrayals of gender and IT in
traditional and non-traditional media outlets.

4. Requirements

For Students Enrolled in I399:

There is no exam or term paper requirement; your final grade will be based on three evenly-
spaced projects, and participation. Participation includes attendance and discussion of the
course readings.

Attendance. You are expected to be physically present and alert during class meetings. You
may miss one class - no questions asked - with no effect on your grade. If you must miss
two or more class sessions for a legitimate reason, contact me (preferably in advance) for
suggestions of what you can do to make up your participation.

Readings and online discussion. You are expected to read the assigned readings and
participate in discussions about them in the discussion group. Every week, one person will
post a summary (2-3 paragraphs, briefly encapsulating each article's main claims) for each
assigned reading, and everyone else will post one or more comments on the summaries.
Good comments will engage specifically and thoughtfully with the content of the readings.
Time will also be devoted to discussing the readings and applying them to contemporary
situations during class meetings.

1st project: Content analysis of representations of gender and computers in print mass
media. Using a principled sampling method, you will select and copy 12 advertisements from
current magazines showing computers and humans, and do a mini-content analysis of how
females and males are portrayed. OR: Do the same for 12 current cartoons showing
computers and humans. Your observations should be written up in a short (3-4 typed page)
report, and should include appendices listing the instances observed. Your report will be due
in Week 6.

2nd project: VoiceThread discussion and analysis of self-representation on a social media
site. You will select a social media site that has user profiles and, using a principled
sampling method, collect 12 profile pictures representing different genders. From these, you
will create a PowerPoint slide displaying four images -- those that are most typical of your
sample or else those you find most interesting -- and submit the slide to me to integrate into
a group VoiceThread (http://VoiceThread.com/). Everyone in the class will analyze your slide
using the multimedia commenting options in VoiceThread (text, audio, and/or video). After this phase is complete, you will briefly present your own analysis of the images on your slide in front of the class. Your slide will be due Week 9; the VoiceThread discussion will take place between Week 9 and Week 10; and your in-class presentation will be in Week 11.

3rd project: Video essay and critiques. To explore current trends in gender and computerization (and learn to use technologies that may be new to you), you will script and record a short (5-6 minute) video essay on a current issue, phenomenon, or debate related to gender and computerization. For this activity you may work alone or in pairs (if you work in pairs, your video should be about 10 minutes long). You must upload your video to Kaltura within Canvas (such that it is viewable without any major technical glitches!) by 10 pm, Sunday, December 13th. You will then critique the content of other students’ video essays by posting comments on them by 5 pm, Wednesday, December 16th.

For Students Enrolled in Z544:

There is no exam or term paper requirement; your final grade will be based on three evenly-spaced projects and participation. Participation includes attendance and discussion of the course readings.

Attendance. You are expected to be physically present and alert during class meetings. You may miss one class, no questions asked, with no effect on your grade. If you must miss two or more class sessions for a legitimate reason, contact me (preferably in advance) for suggestions of what you can do to make up your participation.

Readings and online discussion. You are expected to read the assigned readings and participate in discussions about them in the discussion group. Every week, one person will post a summary (2-3 paragraphs, briefly encapsulating each article’s main claims) for each assigned reading, and everyone else will post one or more comments on the summaries. Good comments will engage specifically and thoughtfully with the content of the readings. Time will also be devoted to discussing the readings and applying them to contemporary situations during class meetings.

1st project: Content analysis of representations of gender and computers in print mass media. Using a principled sampling method, you will select and copy 15 advertisements from current magazines showing computers and humans, and do a mini-content analysis of how females and males are portrayed. OR: Do the same for 15 current cartoons showing computers and humans. Your observations should be written up in a short (3-4 typed page) report, and should include appendices listing the instances observed. Your report will be due in Week 6.

2nd project: VoiceThread discussion and analysis of self-representation on a social media site. You will select a social media site that has user profiles and, using a principled sampling method, collect 16 profile pictures representing different genders. From these, you will create a PowerPoint slide displaying four images -- those that are most typical of your sample or else those you find most interesting -- and submit the slide to me to integrate into a group VoiceThread (http://VoiceThread.com/). Everyone in the class will analyze your slide using the multimedia commenting options in VoiceThread (text, audio, and/or video). After this phase is complete, you will briefly present your own analysis of the images on your slide in front of the class. Your analysis, including the procedure you followed to collect your sample of images, should then be written up as a 3-4 page report. Your slide will be due
Week 9; the VoiceThread discussion will take place between Weeks 9 and 10; your in-class presentation will be in Week 11; and your written report is due in Week 12.

3rd project: Video essay and critiques. To explore current trends in gender and computerization (and learn to use technologies that may be new to you), you will script and record a short (5-6 minute) video essay on a current issue, phenomenon, or debate related to gender and computerization. For this activity you may work alone or in pairs (if you work in pairs, your video should be about 10 minutes long). You must upload your video to Kaltura within Canvas (such that it is viewable without any major technical glitches!) by 10 pm, Sunday, December 13th. You will then critique the content of other students’ video essays by posting comments on them by 5 pm, Wednesday, December 16th.

For Ph.D. students taking the course to satisfy an ILS doctoral seminar requirement:

Your final grade will be based on participation, two presentations of readings, a written research paper, and an oral presentation of your research paper's findings. Participation includes attendance and discussion of the course readings.

Attendance. You are expected to be physically present and alert during class meetings. You may miss one class, no questions asked, with no effect on your grade. If you must miss two or more class sessions for a legitimate reason, contact me (preferably in advance) for suggestions of what you can do to make up your participation.

Readings and online discussion. You are expected to read the assigned readings and participate in discussions about them in the discussion group. Every week, one person will post a summary (2-3 paragraphs, briefly encapsulating each article's main claims) for each assigned reading, and everyone else will post one or more comments on the summaries. Good comments will engage specifically and thoughtfully with the content of the readings. Time will also be devoted to discussing the readings and applying them to contemporary situations during class meetings.

Presentation of readings. For two different weeks, locate an additional article that is related to the week's theme and present its main points in 10 minutes to the class, using PPT slides.

Research paper and oral presentation of research findings. Towards the end of the semester, you will write a 5000-7000 word (excluding front and back material) research paper on a topic related to gender and computerization that integrates ideas and sources presented in the class. A 500-word written proposal describing the data to be analyzed and the methods to be employed, and including a minimum of 3-5 references, is due in the 10th week of the semester. In the last week of the semester, the results of your research will be shared with the class in an oral presentation (approximately 15 minutes). The written paper should follow the formal conventions for a publishable-quality research article, including footnotes and citations of scholarly work in APA (American Psychological Association) style. For examples of APA conventions, see articles in the Journal of Computer-Mediated Communication (http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1083-6101).

ALL STUDENTS:

You are expected to check the Canvas page at least once a day, including the afternoon before class for last-minute announcements and reminders. Posting and commenting in the discussion group is strongly encouraged, if you find interesting articles or other course
related information or activities, please share them with the class through discussion or direct email.

5. Student evaluation

The final grade for students enrolled in I399 will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Attendance and in-class participation</td>
<td>150</td>
</tr>
<tr>
<td>Online participation</td>
<td>150</td>
</tr>
<tr>
<td>First project</td>
<td>200</td>
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<tr>
<td>Second project</td>
<td>200</td>
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<td>Video essay project</td>
<td>200</td>
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<tr>
<td>Video essay critiques</td>
<td>100</td>
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<tr>
<td>Total</td>
<td>1000</td>
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The final grade for masters students enrolled in Z544 will be calculated as follows:

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<tr>
<th>Component</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Attendance and in-class participation</td>
<td>150</td>
</tr>
<tr>
<td>Online participation</td>
<td>150</td>
</tr>
<tr>
<td>First project</td>
<td>200</td>
</tr>
<tr>
<td>Second project</td>
<td>200</td>
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<tr>
<td>Video essay project</td>
<td>200</td>
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<tr>
<td>Video essay critiques</td>
<td>100</td>
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<tr>
<td>Total</td>
<td>1000</td>
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The final grade for doctoral students taking the course to satisfy an ILS seminar requirement will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and in-class participation</td>
<td>150</td>
</tr>
<tr>
<td>Online participation</td>
<td>150</td>
</tr>
<tr>
<td>Reading presentations (50 x 2)</td>
<td>100</td>
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<tr>
<td>Research paper proposal</td>
<td>50</td>
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<tr>
<td>Research paper oral presentation</td>
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<tr>
<td>Research paper</td>
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<tr>
<td>Total</td>
<td>1000</td>
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Grading policies:

- Late online comments on the readings will be accepted once during the semester, no questions asked, provided they are posted within two days after the class meeting in which the readings were discussed. One letter grade (from A to B, etc.) is lost for each day one of the projects is submitted beyond the due date. (Note: If an assignment is due on Wednesday but is submitted on Thursday, the number of minutes late is not considered. Plan accordingly.)

- No other late work will be accepted. If you have an emergency situation please consult with the instructor for possible alternatives.
Policy regarding personal technology use in the classroom:

Sometimes it is useful for a student to have a laptop or other digital device in the classroom, e.g., for note taking or to search the web for information relevant to the class. This use is permitted provided the student observes the following rules:

1) All students wishing to use a laptop or other digital device must sit in the first two rows of the classroom; and
2) Use of laptops and digital devices during class time is limited to activities that relate directly to the course. Surfing the web for other purposes; reading or replying to email, text messages, or Facebook; and other non-class-related use of digital media is not permitted during either face-to-face or online class meetings. Abuse of the laptop and digital device limitation will lead to a loss of participation points for the class.

Statement on academic integrity:

Learning is a collaborative enterprise. However, plagiarism, copyright infringement, and other types of academic dishonesty will NOT be tolerated. To help you recognize plagiarism, the IU Writing Center has prepared a short guide: Plagiarism: What It is and How to Recognize and Avoid It (http://www.indiana.edu/%7Ewts/pamphlets/plagiarism.shtml). Please read this guide and refer to it when you produce your written assignments for this course. Other helpful resources include a tutorial (http://www.indiana.edu/~istd/) and test: “How to Recognize Plagiarism” (http://www.indiana.edu/~istd/test.html) created by the IU School of Education.

Note that TurnItIn will be used for text submissions. You will have access to the plagiarism report for your submission. Check the report and ask questions before the assignment is due. Note that a "zero" TurnItIn score is not expected.

Course Schedule (under construction!)

(Subject to change with advance notice)

Links to readings can be found on our Canvas page. Be sure to use the Module link from either the main page or the sidebar.

Week 1 (8/26/15) Introduction to course. Feminine technologies, masculine technologies, and the "gender computing gap."

Read:


Cleaner version also available through Google Books.


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**Week 2 (9/2/15)**  Women as users and as inventors: A historical look at the relationship between women and technology.

Read 3 of the 5 following:


Browse:

The Ada project: Pioneering women in technology.

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**Week 3 (9/9/15)**  Because it’s boring? Gender attitudes towards computers.

Read 3 of the 4 following:


Week 4 (9/16/15)  A picture is worth a thousand words: Representations of computer users in the print mass media

Watch:


Read:


Week 5 (9/23/15)  Educational experiences with IT and Computer Science.

Read:


Week 6 (9/30/15)  Hackers, geeks, and nerds

1st project

See instructions on Canvas

Read:


Browse:


Week 7 (10/7/15)  Gender and IT professions.

Read:


Week 8 (10/14/15)  Identity and self-presentation on the Internet

2nd Project

See instructions on Canvas
Read:


Week 9 (10/21/15) Computer-mediated communication on the Internet: The hope, the hype, and the reality.

2nd Project

See instructions on Canvas

Read:


Also choose 2 of 4 of the following:


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**Week 10 (10/28/15)  Computers, sex, and sexuality**

**2nd Project**

See instructions on Canvas

Read:


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**Week 11 (11/4/15)  2nd Project Presentations and Discussion**

**2nd Project**

See instructions on Canvas

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**Week 12 (11/11/15)  Digital games and virtual worlds**

**2nd Project**

See instructions on Canvas

Read 3 of the 5 following:


Week 13 (11/18/15) Gender and design

Read 3 of the 4 following:


Thanksgiving break (no class on 11/25/15)

Week 14 (12/2/15) Globalization, militarization, and IT


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**Week 15 (12/9/15) Cyberfeminism, feminist hacktivism, and cyberfutures**

**Read:**


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**Week 16 (12/16/15)**

**3rd project is due**

See details on Canvas

**PhD Student papers are due**

See details on Canvas