

WRPR 147B

Spring 2009

General Information

- Instructor:** Steven Lindell Office: KINSC, Link 308
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www.haverford.edu/cmssc/slindell/
- Title & Description:** Writing Program: *The History of Mechanical Thought*
– an exploration of the history of computer and information systems, from early number systems to binary logic, and from the abacus to the modern computer. We will also explore what makes a machine automatic, or a general purpose calculating machine.
- Class schedule & room:** TTH 10:00-11:30 in Kosh E309.
- Consultation hours:** MW 2:00-3:00 and also by appointment.
- Main reading (Required):** *BIT by BIT: An Illustrated History of Computers*, Stan Augarten, ©1984.
- Additional readings:** *A History of Computing Technology*, Michael R. Williams, 2nd Edition, 1997.
- Prerequisites:** None -- fulfills the freshmen writing requirement.
- Course requirements:** *Attendance is required* at all class meetings (and will be taken). Only two unexcused absences will be tolerated until a *reduction in grade occurs*. Permission for an excused absence (family, medical, religious) must be *obtained in advance*.
- (Critical Writing)** You will turn in a total of approximately 25 pages of completed writing to be graded -- four assignments, each consisting of a one page proposal (abstract/summary) and a five page (revised) paper. All assignments must be submitted electronically in Microsoft Word format for grading purposes. Late work will result in a lowered grade. *Invest the effort to organize your time effectively.*
- (Critical Reading)** There will be about 400 of pages of reading from the required text and a small number of contemporary readings and original sources. You will be expected to send me (via email) two questions on each assignment, some of which will be discussed in class. I reserve the right to give pop quizzes or other methods of assessment to ensure the reading is being done carefully. Part of our time will be devoted to learning how to do research, both in the library and on the Web.
- (Speaking)** In addition to class discussions, each student will be expected to give a short (5 minute) presentation about a topic in the future of computing technology.
- Rules and regulations:** The Honor Code expects academic honesty in every aspect of every class at Haverford. Everything turned in for a grade must be your own work, except for sources that are cited. The basic rule is simple: if you use somebody else's ideas, be sure to cite the source; and if you use their words, put them in quotes.

Syllabus

Based on course outline at: www.computinghistorymuseum.org/ by Prof. Tim Bergin of American University

Week	Unit	No. Title of Lecture	Tentative Assignment topics (incomplete and subject to revision)
1	Introduction	0. Overview	<i>Writing Sample:</i> topic -- Is reality analog or digital?
2	1 st	1. Numeration	What makes a machine autonomous, both mentally and physically?
3		2. Early Aids to Calculation	
4		3. Charles Babbage	
5	2 nd	4. Hollerith & Early Accounting Machines	What was the societal impact of computing technology before modern computers were invented?
6		5. a. Information Appliances b. Office Appliances	
7		6. a. Analog Devices b. Mechanical Monsters	
8	3 rd	7. a. The Electronic Revolution b. John Vincent Atanasoff c. ENIAC	What people and ideas were responsible for the real origins of the modern computer?
9		8. Early Stored Computer Programs	
10		9. Mainframe Computing	
11	4 th	10. a. History of Transistors b. Digital Electric Computer Company	Question as to whether computers will ever be artificially intelligent or conscious.
12		11. The Computer Industry: Year by Year	
13		12. a. Microcomputing b. Personal Computing	
14	Conclusion	13. References	<i>Short Presentations (with abstracts)</i>

Each three-week unit of the course will have assigned reading and an assigned essay, with more details forthcoming. The assignment will be broken into three parts. In the first week, a one-page proposal is due, which I will comment on. In the second week, a five-page draft is due, and revisions will be suggested. In the third week, the final revised paper is due together with an abstract (summary) of your paper, both of which will be graded and returned.

In class, we will try to discuss both the form and style of critical writing, in hopes that it will make you a better writer. In addition, we will emphasize the skills of critical reading, so you can become a better reader also.

Writing Center (and tutors): at least one assignment will require you to use this valuable resource.