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History 224RH

An Anecdoted Topography of Chance:

Instrumental History of Science for SETS majors
(a.k.a. SETS Common Experience)

Spring 2009

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Office hours: Wed. 9-11 am & by appt., Wilson 2-168

Class hours: T & Th, 12.45 - 2.00 pm

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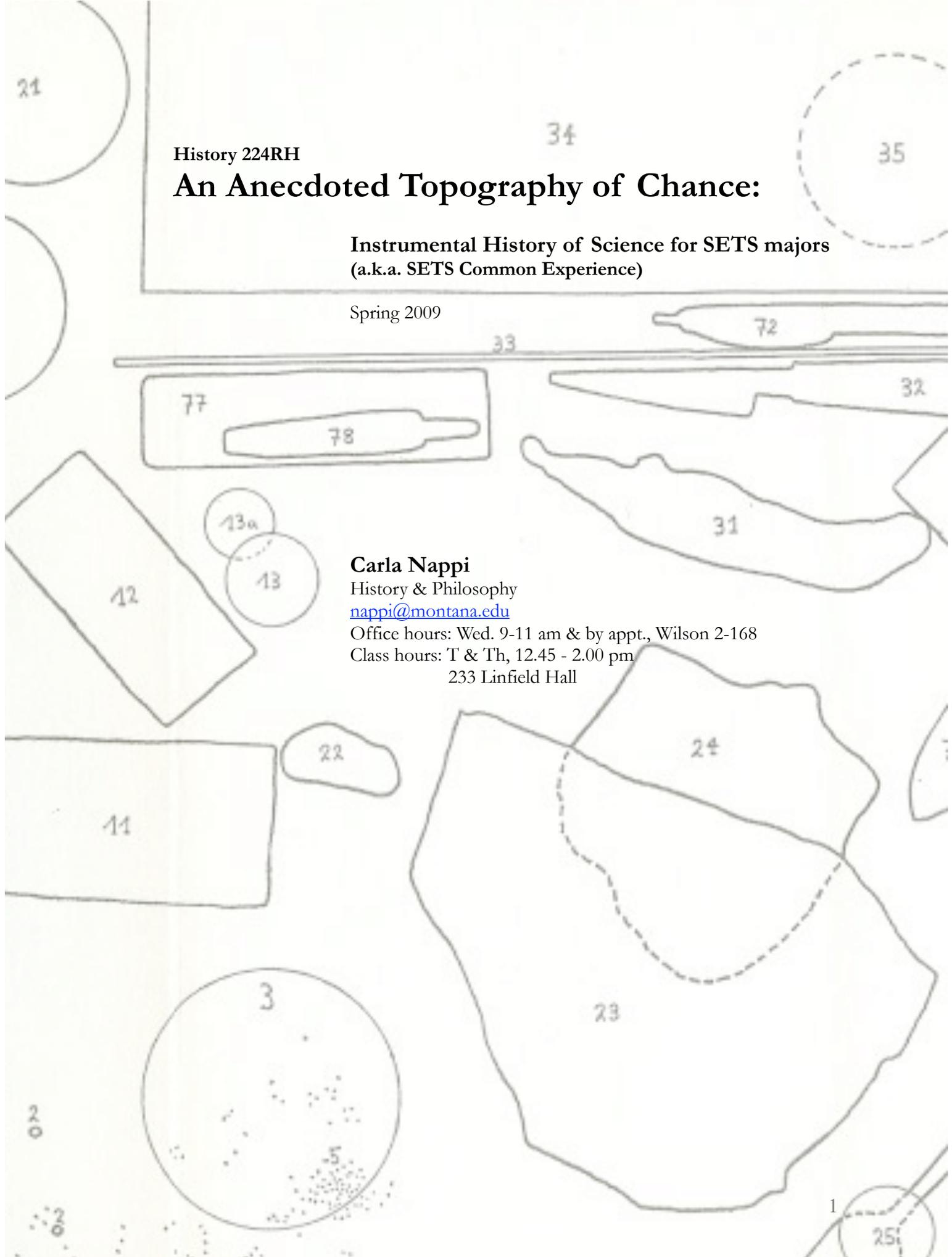
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I INTRODUCTIONS

Who I Am

I'm a historian of science and medicine, with a heavy research focus on natural history in early modern China. I just finished a book manuscript, *The Monkey and the Inkpot: Natural History and its Transformations in Early Modern China*. I've also begun work on two new projects: the first looks at exchange of natural objects among the Chinese empire and its borderlands in the early modern world; the second is a more theoretically-informed project on the senses and contemporary arts and sciences. I'm also working on a longer-term project on Chinese-Islamic scientific and medical exchange across the silk routes, and you might run into me in Intermediate Arabic this spring.

You'll learn quickly that I have a very unorthodox approach to history. I like experiments, risks, and creativity. I appreciate hard work. I like being challenged, and change my mind often. I don't sleep much. I'm a Gen-Xer, I obsess, I'm in favor of the reformulated Starbuck character on the new *Battlestar Galactica* and Dorota is my second-favorite character on *Gossip Girl*. I read a lot. I lend out my books all the time (so feel free to ask if there's something you'd like to borrow). I like cheese and graphic novels.

How to Get in Touch With Me

The best way to contact me is **always, always** via email: nappi@montana.edu. Unless I'm traveling, you can expect a reply within 24 hours (though often much sooner than that). You can try my office phone in an emergency (994-6798) but email will be quicker (always, always). My office hours during the Spring 09 semester are Wednesdays 9-11, but feel free to make another appointment or drop in whenever my door is open.

Who You Are (And Who Should Be Taking This Class)

You are a SETS major, are seriously considering a SETS major, or otherwise have a strong interest in the history of science. You're willing to challenge your presuppositions and to put some serious time into reading and thinking about the course materials. You care about your education (however you define "education" and whatever setting in which learning takes place for you, classroom or bathroom or living room or the top of a mountain). You will not turn in assignments that are cut-and-pasted from websites or plagiarized from the work of others. You see the classroom setting as a community of like-minded fellow travelers, and you respect your classmates.

II THE COURSE

An Anecdoted Topography of Chance

This seminar will serve as an introduction to the history of science, technology, and medicine. My major goal is to introduce the basic parameters of the field while setting you up for your intensive research capstone seminar (401) by providing you with the research tools you'll need to plan and write a fantastic research paper. We'll be using a rather unusual model to think through the research process: the book *An Anecdoted Topography of Chance* by Daniel Spoerri. I'll be telling you all about this artists' book (and what it has to do with our work in the history of science) on the first day of class. In brief, the book is a kind of annotated map of the events, objects, people, and facts that emerge from the history of one table on one day in one place. Plus, it's completely rad. We'll talk more about it over the course of the semester.

Instrumental History of Science

If the title of the course (see above) indicates our research model, then the subtitle hints at the major building blocks of the semester. A great deal of recent historiography has focused on the significance of tools, objects, and instruments in shaping science. We will follow that model by focusing on a particular kind of tool (some physical, many conceptual) each week: authors, objects, pages, etc. This is meant not only to introduce you to a series of major approaches in the SETS field, but also to help you build your own toolkit for doing innovative and solidly-grounded historical work.

What Our Goals Are

By the end of the course, we will collectively:

- Have the fundamental tools to understand how to go about conceiving and undertaking a research project within the SETS field
- Find ways to do interdisciplinary work that incorporates innovative materials and ideas into exploring questions that *you* find meaningful and exciting
- Introduce some of the major literature and methodologies of science studies, and be equipped to evaluate recent work from several subfields of the history of science
- Develop your critical writing skills

III GRADING AND ASSESSMENT

Requirements

All requirements must be completed in order to pass the course:

1. Weekly reading assignments (due on the date indicated in the course syllabus)
2. Four thinkpiece assignments due over the course of the semester (two due before spring break and two due afterward)
3. Participation in class discussions (Please let me know privately, via email or in person, if you are not comfortable speaking in a group. I can work with you to develop your skills, and/or we can set up an alternative.)
4. Completion of all written assignments, including book review and research prospectus (including title and abstract, annotated bibliography, and final

prospectus with outline)

Guidelines for the written assignments will be distributed in class. No late work will be accepted!

Grading

1. Participation (25%)

Grade includes in-class participation, your performance as discussion leader, and your 4-5 page response essay to be posted during your week as discussion leader. I will distribute a midterm assessment for each student to give you an idea of how you're doing in this aspect of the course and what you might need to work on.

2. Book review (15%)

Due March 05 in class.

3. Four Thinkpieces (20%)

Two due on any two weeks before spring break, two due after. Thinkpieces should be posted by **Tuesday at 7 pm** of the weeks that you post them.

4. Final Research Prospectus (40%)

Grade includes title and abstract (5%, due February 12), annotated bibliography (10%, due March 24), and final prospectus with outline (25%, due April 30). More information about the specific guidelines and requirements for these assignments will be distributed in due course.

Leading Discussion

All students are responsible for doing the assigned reading before each session of the seminar. In addition, you will take turns leading a session of the seminar by presenting a **FIVE MINUTE** overview of the reading (including a brief discussion of major themes and critiques), and presenting questions for discussion. You should each lead seminar once.

In preparation for leading seminar, you will be asked to write a 4-5 page (typed, double-spaced) response essay. The very best of these will also provide an additional bibliography of any major supplementary sources you consulted for that week's reading: major book reviews during weeks when we're reading a book, or other sources when we're reading articles, including reviews of an author's major work. Please also come to seminar armed with basic biographical information on the author or authors of the week: Who are they? Where do they currently work? Each member of the class is responsible for reading the weekly seminar leader's essay before Thursday's discussion.

Your 4-5 page response essay should:

1. Provide a brief overview of the major themes in the week's book or other reading.
2. Critique some aspect of the book based on your own reading and whatever

supplementary material (reviews, etc) you may have consulted. You can also use your critique to place the reading in historiographical perspective. See me if you're not sure where to look for major reviews.

3. Present questions for discussion that reflect your careful reading of the book or articles.

We will be posting response essays and most other course material (including weekly readings) on the discussion board of our WebCT site for the course. Please post your review no later than **Tuesday at 7:00 p.m of the week you are leading discussion.**

Each week, everyone should read the weekly response essays carefully before the Thursday class meeting. During the seminar the week's leader will begin and lead the discussion, though I will jump in and help as well. When leading discussion:

DO ask questions that get at the bigger themes and historiographical content of the reading

DO try to help your colleagues understand how the reading fits into larger debates in our course, or in the history of science more broadly speaking if possible

DO try to spark vigorous debate when possible

DON'T launch into lengthy monologues or lectures about the reading

DON'T simply give up if you find the material to be difficult! Every book is on the syllabus for a reason. Persevere, my friends.

DON'T wait until the last minute to get through the reading.

How I Will Grade Participation

In this course, a significant part of your grade will be based on participation in class and on the course WebCT site through thinkpieces and response essays. Please use the following as a guide to help you assess your participation in class:

A-LEVEL PARTICIPATION

- The student consistently raised insightful comments and questions that prompted on-topic discussion
- The student consistently and explicitly engaged the course materials in discussion, demonstrating that s/he read and thought about each week's reading material
- In discussion, the student consistently helped clarify or synthesize other classmates' ideas with thoughtful remarks.
- If disagreeing with another classmate's ideas, the student stated his/her disagreement or objections clearly, yet politely
- The student used clear and correct English in her/his written work, paying attention to grammar, spelling, and capitalization.

B-LEVEL PARTICIPATION

- The student was notably lacking in one or two of the items listed for A-

- level participation
- The student failed to submit thinkpieces on time for two or more weeks
- The participant usually, but not always, expressed her/himself clearly

C-LEVEL PARTICIPATION

- The student was consistently lacking in two or more of the items listed for A-level participation
- The student failed to submit thinkpieces on time for four or more weeks
- The student rarely expressed him/herself clearly, or rarely spoke in class, even when prompted.

D-LEVEL PARTICIPATION

- The student was consistently lacking in two or more of the items listed for A-level participation
- The student rarely expressed him/herself clearly, or rarely spoke in class, even when prompted.
- The student failed to submit thinkpieces or responses on time for six or more weeks

F-LEVEL PARTICIPATION

- The student was rude or abusive to other course participants
- The student consistently failed or refused to participate at all, even when specifically prompted or questioned, even if the student's participation otherwise conforms to a higher level on the rubric

III THE COURSE WEBSITE

The Importance of Checking Email

IT IS VITAL that you check your email regularly, as email is the primary medium I will use to contact you about the course. If you don't use your myportal account, make sure to provide me with an alternate email address **BY WEEK TWO** at the latest.

The Course Website on WebCT

The course WebCT site is a virtual extension of our classroom for the semester. Get to know it!

<http://webct.montana.edu/>

Log in with your WebCT ID. Click on Tab for "HIST224RH01s09." The "Course Menu" on the lefthand side of the page lists all of the course components, including the discussion board, course readings, and other handouts.

Posting on the Discussion Board

The discussion board is our primary space for talking with each other, posting essays

and thinkpieces on the week's material, and generally rocking out. To post on the discussion board:

1. Click "Discussions"
2. Click on the topic for the week ("Week 2," etc.)
3. To post a new thread, Click the bar for "Compose Message" and follow the directions.
4. To post a response: Click on the icon next to the posting you'd like to respond to, and hit "Reply" to post your response.

And so on, and so on. Lather, rinse, repeat.

You must post four thinkpieces over the course of the semester: two before spring break and two after. They are meant for you to have a space to think about the week's readings and issues before you come to discussion. Together they will make up 20% of your grade. I will assign a particular question for some weeks' thinkpieces, but for the most part they will be completely free-form. There is no minimum required length, and you should feel free to use the space as creatively as you'd like: raise questions, work through something in the readings that particularly interested or troubled you, post a drawing inspired by one of the assigned paintings for the week, etc. The important thing is to demonstrate that you are engaging with the readings. Be creative. Shake it like a Polaroid picture.

Your essays and thinkpieces should indicate that you've read and understood the week's material. Make sure to use proper English, paying attention to spelling, capitalization, etc. When citing course materials in your post, give the relevant info (title and page # or URL) in a parenthetical note.

IV WEEKLY GUIDES

I will be posting a guide to each week's material and assignments on WebCT by the Tuesday of the prior week. You are responsible for reading them each week, as they will contain important information, changes, and updates. So say we all.

V READINGS

The course material will include short essays, images, and files posted to the WebCT site. The following books will also be required, and are available for purchase or on reserve in Renne Library:

1. Mario Biagioli, *Galileo's Instruments of Credit*
2. Jutta Schickore, *The Microscope and the Eye*
3. Warwick Anderson, *The Collectors of Lost Souls*
4. Shapin and Schaffer, *Leviathan and the Air Pump*
5. Ken Alder, *The Lie Detectors*
6. Sigrid Schmalzer, *The People's Peking Man*

VI SEMESTER SCHEDULE IN OUTLINE*

Week 1 (Jan. 15)	Introduction: Topographies
Week 2 (Jan. 20 & 22)	Sciences
Week 3 (Jan. 27 & 29)	Authors
Week 4 (Feb. 03 & 05)	Facts
Week 5 (Feb. 10 & 12)	Pages
Week 6 (Feb. 17 & 19)	Things
Week 7 (Feb. 24 & 26)	Images
Week 8 (March 03 & 05)	Senses
Week 9 (March 10 & 12)	Organisms
Week 11 (March 24 & 26)	Stories
Week 12 (March 31 & April 02)	Rumors
Week 13 (April 07 & 09)	Secrets
Week 14 (April 14 & 16)	Machines
Week 15 (April 21 & 23)	Souls
Week 16 (April 28 & 30)	Lives

* The Management reserves the right to adjust as necessary.

Week 1 TOPOGRAPHIES

Thursday, January 15 Introduction to the Course

Readings: Make sure to read the syllabus carefully. There is a lot of information about the course in here, and you're responsible for its contents!

Week 2 SCIENCES

Tuesday, January 20 What is history of science the history of?

Thursday, January 22 NO CLASS. Use this as a reading day to get started on Biagioli for next week.

Readings: Deborah Harkness, *The Jewel House* (Excerpt; on WebCT) **Tu**
Katharine Park and Lorraine Daston, eds., *The Cambridge History of Science: Early Modern Science* (Selected articles; on WebCT) **Tu**

Week 3 AUTHORS

Tuesday, January 27 Authorship and the history of the Scientific Revolution

Thursday, January 29 Discussion of Biagioli

Readings: Mario Biagioli, *Galileo's Instruments of Credit* **Th**

Week 4 FACTS

Tuesday, February 03 Doing the history of concepts

Thursday, February 05 Discussion of Shapin and Schaffer

Readings: Steven Shapin and Simon Schaffer, *Leviathan and the Air Pump* **Th**

Week 5 PAGES

Tuesday, February 10 History of science as book history

Thursday, February 12 Discussion of Johns and *Books and the Sciences in History*

Readings: Adrian Johns, *The Nature of the Book* (Excerpt; on WebCT) **Tu**
Frasca-Spada and Jardine, eds., *Books and the Sciences in History* (Excerpt; on WebCT) **Th**

Important Event: Research project title and abstract due in class, Thursday February 12!

Week 6 THINGS

Tuesday, February 17 Material culture and the history of science

Thursday, February 19 Discussion of Smith and Daston

Readings: Pamela Smith, *The Body of the Artisan* (Excerpt; on WebCT) **Tu**
Lorraine Daston, ed., *Things that Talk* (Excerpt; on WebCT) **Th**

Week 7 **IMAGES**

Tuesday, February 24 Seeing science
Thursday, February 26 Discussion of Schickore

Readings: Jutta Schickore, *The Microscope and the Eye* **Th**

Week 8 **SENSES**

Tuesday, March 03 Sensing science
Thursday, March 05 Discussion of Smith and the sensation assignment

Readings: Mark Smith, *Sensing the Past* (Excerpt; on WebCT) **Tu**
Sensation assignment **Th**

Important Event: Book review of Biagioli, Shapin & Schaffer, or Schickore due in class, Thursday March 05!

Week 9 **ORGANISMS**

Tuesday, March 10 Model organisms in the history of science
Thursday, March 12 Discussion of Todes and Endersby

Readings: Daniel Todes, "Pavlov's Physiology Factory" (on WebCT) **Tu**
Jim Endersby, *A Guinea Pig's History of Biology* (Selection; on WebCT) **Th**

Week 10 **RELAXATION**

Tuesday, March 17: Enjoy Spring Break!
Thursday, March 19: Enjoy Spring Break!

Week 11 **STORIES**

Tuesday, March 24: Body Language. Co-meeting with Lynda Sexson's class today.
Thursday, March 26: NO CLASS. Nappi at AAS Annual Meeting

Readings: Nappi, "Body Language" (on WebCT) **Tu**
Important Event: Research project annotated bibliography due in class, Tuesday March 24!

Week 12 **RUMORS**

Tuesday, March 31 Public science
Thursday, April 02 Discussion of Schmalzer

Readings: Sigrid Schmalzer, *The People's Peking Man* **Th**

Week 13 SECRETS

Tuesday, April 07 Private science
Thursday, April 09 Discussion of Geison and Kaiser

Readings: Gerald Geison, *The Private Science of Louis Pasteur* (Excerpt; on WebCT)
Tu
David Kaiser, *Drawing Theories Apart* (Excerpt; on WebCT) **Th**

Week 14 MACHINES

Tuesday, April 14 Technology and culture
Thursday, April 16 Discussion of Alder

Readings: Ken Alder, *The Lie Detectors* **Th**

Week 15 SOULS

Tuesday, April 21 Colonialism and the anthropology of science
Thursday, April 23 Discussion of Anderson

Readings: Warwick Anderson, *The Collectors of Lost Souls* **Th**

Week 16 LIVES

Tuesday, April 28 Biographies of historical and scientific objects
Thursday, April 30 Conclusion of the course: Topographies

Readings: Lorraine Daston, ed., *Biographies of Scientific Objects* (Brief Excerpt; on WebCT) **Tu**

Important Event: Final research prospectus and outline due in class, Thursday April 30!

**(NOTES: Next time, move the due dates up, do a first-run at the final prospectus possibly. Use TPs as part of participation grade, or somehow encourage them to take the responses more seriously; either weekly TPs, or more formal discussion papers.)