Visual Culture of Science and Technology

Course description:
This course examines the imagery of science and technology, the role of visuality in the construction of scientific knowledge, artistic renditions of science, and the emergence of visual technologies in modern society. It looks at how visuality has been key to the exercise of power through such practices as cataloguing and identification; the designation of abnormality, disease, and pathologies; medical diagnosis; scientific experimentation; and the marketing of science and medicine. We will examine the development of the visual technologies in the emerging scientific practices of psychiatry and criminology; explore the sciences of eugenics, genetics, pharmacology, brain and body scans, and digital medical images of many kinds; the marketing of pharmaceuticals, popular culture representations of science and technology, and the politics of scientific activism.

Course Reading:

Books:
Jose van Dijck, *The Transparent Body: A Cultural Analysis of Medical Imaging*

Essay readings will be posted in pdf form on Blackboard under Course Documents.

Course Requirements:
Students are required to attend all class meetings, complete the readings, and complete all assignments. Class sessions will cover much more material than the reading and attendance at them will be monitored. If you miss more than 4 classes without a reasonable excuse, your grade will be lowered.
In addition to the lecture, this course will have a class blog which will require you to regularly make postings in relation to course topics and discussion. In it, you should respond to readings, ideas, images from class and other readings and images that you have come across outside of class. I will also provide you with regular blog prompts. You must provide a clear, coherent analysis / response to the issues, themes, questions, debates. Do not simply describe, reiterate, paraphrase or quote, but explain what is interesting, what is theoretically convincing or questionable, what is pertinent, problematic, exemplary, etc. We will use the blog as an integral part of class discussion with occasional presentations.

You are free to post any items you wish, as long as they relate to your entry and are explained/analyzed: images, clips, links, music videos, newspaper articles, blogs, etc. You should have a minimum of 10 entries over the course of the semester.

Assignments and grading:
You are responsible for the material covered in class and in the reading. You will be evaluated on (1) the level of your engagement with the class materials (as evidenced in your written work and class participation) (2) your capacity to explain your ideas and analysis in articulate and well-written forms (3) and your ability to creatively explore these theories and methodologies. All of your written work will be graded on two primary evaluative scales (1) how well it demonstrates an understanding of the theories and methodologies of the class (2) how well it structures and articulates its argument.

There are two papers and a final project in addition to the blog postings. These assignments will be worth the following portion of your grade:
Blog postings  25%
paper 1   20%
paper 2   25%
final project  30%

The first paper will be an evaluation of early scientific practices for which you will be given a choice of several topics. You will choose a topic for both the final paper and final project, both subject to professor approval. Final projects will be both written and visual in some media form (photography, website, video) and will engage with questions of science, technology, visuality, and the exercise of power in some way.
Evaluation Rubric
A=Excellent
This work is comprehensive and detailed, integrating themes and concepts from discussions, lectures and readings. Writing is clear, analytical and organized. Arguments offer specific examples and concisely evaluate evidence. Students who earn this grade are prepared for class, synthesize course materials and contribute insightfully.

B=Good
This work is complete and accurate, offering insights at general level of understanding. Writing is clear, uses examples properly and tends toward broad analysis. Classroom participation is consistent and thoughtful.

C=Average
This work is correct but is largely descriptive, lacking analysis. Writing is vague and at times tangential. Arguments are unorganized, without specific examples or analysis. Classroom participation is inarticulate.

D=Unsatisfactory
This work is incomplete, and evidences little understanding of the readings or discussions. Arguments demonstrate inattention to detail, misunderstand course material and overlook significant themes. Classroom participation is spotty, unprepared and off topic.

F=Failed
This grade indicates a failure to participate and/or incomplete assignments

Academic Dishonesty and Plagiarism
The relationship between students and faculty is the keystone of the educational experience at New York University in the Steinhardt School of Culture, Education, and Human Development. This relationship takes an honor code for granted and mutual trust, respect, and responsibility as foundational requirements. Thus, how you learn is as important as what you learn. A university education aims not only to produce high-quality scholars, but to also cultivate honorable citizens.

Academic integrity is the guiding principle for all that you do, from taking exams to making oral presentations to writing term papers. It requires that you recognize and acknowledge information derived from others and take credit only for ideas and work that are yours.

You violate the principle of academic integrity when you
- cheat on an exam,
- submit the same work for two different courses without prior permission from your professors,
- receive help on a takehome examination that calls for independent work, or
- plagiarize.
Plagiarism, one of the gravest forms of academic dishonesty in university life, whether intended or not, is academic fraud. In a community of scholars, whose members are teaching, learning, and discovering knowledge, plagiarism cannot be tolerated.

Plagiarism is failure to properly assign authorship to a paper, a document, an oral presentation, a musical score, and/or other materials that are not your original work. You plagiarize when, without proper attribution, you do any of the following:
- copy verbatim from a book, an article, or other media;
- download papers from the Internet and claim they are your own;
- purchase papers and claim they are your own;
- report from other’s oral work;
- paraphrase or restate someone else’s facts, analysis, and/or conclusions; or
- copy directly from a classmate or allow a classmate to copy from you.

The Steinhardt School of Culture, Education, and Human Development imposes heavy penalties for plagiarism in order to safeguard the degrees that the University grants. Cases of plagiarism are considered among the most serious of offenses.

**Student Resources**
- Students with physical or learning disabilities are required to register with the Moses Center for Students with Disabilities, 719 Broadway, 2nd Floor, (212-998-4980) and are required to present a letter from the Center to the instructor at the start of the semester in order to be considered for appropriate accommodation.

- **Writing Center**: 269 Mercer Street, Room 233. Schedule an appointment online at [www.rich15.com/nyu](http://www.rich15.com/nyu) or just walk-in.
SCHEDULE OF TOPICS, READINGS, AND ASSIGNMENTS

Week 1:

Jan. 25—Introduction

Jan. 27—Defining Visual Culture
Reading:
Nicholas Mirzoeff, *Introduction to Visual Culture*, Introduction
Marita Sturken and Lisa Cartwright, *Practices of Looking*, Chapter 1

Week 2:

Feb. 1—Discourse, Objectivity, and Power
Reading:
Michel Foucault, *The History of Sexuality* (excerpt) and *Discipline and Punish* (excerpt)
*Practices of Looking*, pp. 347-350
Jose van Dijck, *The Transparent Body*, Chapter 1

Feb. 3—The Emergence of Science and Cabinets of Wonder
Reading:
http://www.metmuseum.org/toah/hd/kuns/hd_kuns.htm
Peter Bowler and Iwan Morus, “The Scientific Revolution”
Lawrence Weschler, *Mr. Wilson’s Cabinet of Wonders* (selection)

Week 3:

Feb. 8—Fantasies of Science and Male Creation
Reading:
Mary Shelley, *Frankenstein* (excerpts)
http://www.literature.org/authors/shelley-mary/frankenstein/index.html
Andreas Huyssen, “The Vamp and the Machine”

Feb. 10—The Theater of Anatomy
Reading:
*Practices of Looking*, pp. 350-355
Jose van Dijck, *The Transparent Body*, Chapter 7
Erwin Panofsky, “Artist, Scientist, Genius”
Recommended:
PAPER ASSIGNMENT 1 GIVEN
Week 4:

Feb. 15— Perspective and the Science of Looking
Reading:  
Practices of Looking, Chapter 4

Feb. 17—The Morgue and the Wax Museum
Reading:  
Vanessa Schwartz, “Public Visits to the Morgue”

Week 5:

Feb. 22— Visual Technologies of Modernity and Reproduction
Reading:  
Practices of Looking, Chapter 5

Feb. 24— The Photograph as Catalogue and Measurement
Reading:  
Practices of Looking, pp.355-64  
Allan Sekula, “The Body and the Archive”  
Stephen J. Gould, The Mismeasure of Man (excerpt)  
PAPER ASSIGNMENT 1 DUE

Week 6

March 1— Imaging the Criminal and the Origins of Forensics
Reading:  
Cesare Lombroso, The Criminal Mind (excerpt)  
Sandra Philips, Police Pictures (excerpt)

March 3—X-Ray and The Transparent Body
Reading:  
Jose van Dijck, The Transparent Body, Chapter 5  
Lisa Cartwright, Screening the Body, excerpt
Week 7

March 8—Fantastic Voyages, Bodily Interiors
Reading:
Jose van Dijck, *The Transparent Body*, Chapter 4

March 10—Microphotography and Imaging the Body at War with Disease
Reading:
*Practices of Looking*, pp. 369-73
Marita Sturken, *Tangled Memories*, Chapter 7
Lennart Nilsson, *The Body Victorious* (excerpt)
PAPER ASSIGNMENT 2 GIVEN

March 14-18, SPRING BREAK

Week 8:

March 22—Body Worlds and Plastinated Cadavers
Reading:
Jose van Dijck, *The Transparent Body*, Chapter 3

March 24—Biological Personhood and Ultrasound
Reading:
*Practices of Looking*, pp. 364-69
Carol Stabile, “Shooting the Mother: Fetal Imagery and the Politics of Disappearance”
Jose van Dijck, *The Transparent Body*, Chapter 6

Week 9

March 29—The Digital Body
Reading:
*Practices of Looking*, pp. 373-381
Jose van Dijck, *Imagenation*, excerpt

March 31—Imaging Genetics
Reading:
Jose van Dijck, *The Transparent Body*, Chapter 7
Donna Haraway, “Modest Witness @ Second Millennium”
Week 10

April 5—Brain Scans as Knowledge
Reading:
Joseph Dumit, *Picturing Personhood*, selections

April 7—Visual Technologies of Mapping—Satellite images and the Globe
Reading:
*Practices of Looking*, pp. 389-97
Jody Berland, “Mapping Space”
Denis Cosgrove, “Contested Globe Visions”

Week 11

April 12—Imaging Environment/Climate Change
Reading:
Nick Mirzoeff, “The Sea and the Land”
http://www.whatismissing.com
http://www.350.org/

April 14—Cyborg Visions
Reading:
Vivian Sobchack, “Beating the Meat/Surviving the Text”
Recommended:
Donna Haraway, “Manifesto for Cyborgs”
PAPER ASSIGNMENT 2 DUE

Week 12

April 19—Apocalyptic Science and Popular Culture
Reading:
Peter Paik, *From Utopia to Apocalypse* (excerpt)

April 21—Biosecurity and the New Forensics
Reading:
Week 13

April 26 — The Visual Politics of Disease
Reading:
Marita Sturken, *Tangled Memories*, Chapter 4
Barbara Ehrenreich, “Welcome to Cancerland”

April 28 — Selling Pharmaceuticals and the New Self
Reading:
*Practices of Looking*, pp. 381-84
Joseph Dumit, “Drugs for Life”
Jonathan Michel Metzl, *Prozac on the Couch*, excerpt

Week 14

May 3 — Bioart
Reading:
Beatriz da la Costa, “Reaching the Limits: When Art Becomes Science”

May 5 — Conclusion
FINAL PROJECTS DUE