

LCC 3362 L: Science, Technology, and Performance
Prof. Philip Auslander
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Office Hours: MWF 1:00-2:00 and by appointment

Prerequisite: ENGL 1102

Core Area: This course fulfills the Core Area C: Humanities/Fine Arts requirement.

Course Description

If one thinks of performance as essentially a kind of expressive communication, then communications of scientific knowledge can be considered performances. This course uses the concept of performance as a heuristic for considering a range of historical and contemporary situations in which scientific knowledge is communicated--and sometimes created--through acts of performance. In each case, it is necessary to consider what genre of performance is involved, who the performers and audience are and what their relationship is, the material circumstances of the performance, its function or purpose, and so on. Aesthetic performances can also reflect scientific ideas directly or indirectly and we will consider a few instances of this kind.

Learning Outcomes

- Science and Technology Knowledge Construction: Students will understand that both scientific and technological innovation and the ways new scientific knowledge is both created and disseminated occur in specific social, historical, and communicative contexts.
- Historical Analysis: Students will study literary and cultural texts and performances within historical frameworks to become familiar with the various forces that shape the production and dissemination of scientific knowledge. They will learn to interpret history actively, rather than passively accepting archival information.
- Interpretive Frameworks: Students will become familiar with the concept of performance as an interpretive framework drawn from a variety of social, cultural, and philosophical theories and be able to apply this framework to both scientific and creative texts, as well as to their own cultural observations.

General Requirements

- Course Reading and Attendance
- Active participation in discussion and class activities, including group work
- Completion of Assignments enumerated below

You are not permitted to use materials developed for other courses to fulfill these requirements.

Please note the grade penalties for not submitting required assignments by their deadlines described below under General Policies.

This course will be conducted primarily on the basis of lecture and discussion. Group work to be done primarily outside of class is another key feature and you are expected to do all you can to make your group function smoothly, including making it possible to meet outside of class time.

Attendance Policy

“Personal” Days

You are entitled to four “personal days” for which you may be absent for any reason, including ordinary medical issues. This is your quota of excused absences.

The only other form of excused absence I recognize is absence for participation in Institute-sanctioned activities (e.g., sports, course-related field trips and other departmentally approved activities, etc.). Such absences are not considered “personal days.” Documentation of your participation in such activities is required and should come from the Registrar’s office.

Please note also that I do not give make-up quizzes except under extraordinary circumstances.

In the case of emergencies, serious medical issues, or personal situations affecting your ability to attend class or your academic performance, please consult with the Dean of Students Office. (Visit their website for more information on attendance: <http://deanofstudents.gatech.edu/plugins/content/index.php?id=25>.)

For each non-excused absence after your fourth “personal day,” I will deduct 1.5 points from your final grade. If you fail to attend on a day when your group is scheduled to make a presentation you will fail the course.

Think ahead. If you know in advance that you must miss a certain class meeting be sure not to miss more than three others.

I will take attendance no earlier than twenty minutes into each class session. If you are not present when I take attendance, you will be considered absent from that class session.

If you need to leave a class session early, please inform me before the start of the session and sit near the front of the room so that your departure can be minimally disruptive.

If you sleep (or appear to sleep) during a class session, or engage in activities not conducive to participation (e.g., applying make-up, checking your messages) you will be considered absent from that class session.

Please note that Georgia Tech policy requires you to wait twenty minutes for the instructor to arrive before concluding that the class is not meeting (this policy is included here primarily for your information).

Readings

All course readings will be made available to you in .pdf form via the course's T-Square website. Please print out these readings and bring the relevant ones to class (i.e., bring the readings assigned for a given day to class on that day).

Personal Electronics Policy

Although I fully appreciate the value of electronic devices, I do not permit the use of them during class sessions. This applies to laptops, tablets, PDAs, cell phones, iPods, IM devices, etc. I will announce any exceptions to this policy.

Please do not use these or any other personal electronics during class. Put them away. (If you're expecting a life and death call, please set your phone to vibrate, sit near the front, and discretely leave the classroom when the call arrives.) If you have a documented disability that necessitates your use of an electronic device, please consult with the ADAPTS program (see below).

Grading

Please note: work that simply meets the requirements of the assignment will receive a grade of "C." Grades of "A" and "B" designate levels of distinction in quality and content of the work.

Two Quizzes @ 15% = 30%

Performance Analysis: 35%

Group Project (all members of each group will receive the same grades in this category):

Proposal: 10%

Project: 25%

Final Grade Scale: To get a final grade of A, you must have earned at least a numerical grade of at least 90 (out of 100). For a B, you must have a numerical grade of at least 80; 70 for a C; 60 for a D. Please use these benchmarks to interpret your numerical grades.

The numerical grade generated by this calculation is subject to modification in either direction in light of attendance, any extra credit, class participation, and other indications of engagement with and commitment to the course (or lack thereof). Please note that I do not automatically round up numerical grades.

Required Work

More information and details on all assignments will be posted on T-Square and discussed in class. All deadlines are provided on the course schedule at the end of this

syllabus. Policies regarding the submission of work appear below under General Policies.

Quizzes

You will take two quizzes in the course of the semester. The purpose of the quizzes is to assess your mastery of the course material included in our readings and class sessions. Unless I announce otherwise, the quizzes will be made up primarily of short answer questions and you will have the entire class session (50 minutes) in which to complete each one.

Performance Analysis

The purpose of this assignment is to assess your ability to apply the analytical concepts we discuss in the course to a specific case. It could be a detailed analysis of a specific event, current or historical, as a performance of the production or dissemination of scientific knowledge using the ideas and categories developed in the class. It could be an analysis of an artistic performance related directly or indirectly to scientific knowledge (we will discuss a few of these in the third unit of the course). In any case, it should derive from a thorough understanding of the event in question based on research into it. Your analysis should be conducted using concepts from the course and course readings and their associated terminology. Please note that which readings are the most useful will depend on the topic.

The default version of this assignment is a paper 1250-1500 words in length. If you wish to execute the assignment creatively in another form, I am open to the possibility.

However, you will need to get my explicit permission to complete the assignment in an alternate form. It is important that a project in an alternate form meet the same standards for analysis, argumentation, and reference to course concepts and materials as a written project. You should state how you will accomplish this when you seek permission.

Group Project

I will divide the class into project groups as early in the semester as possible. The group tasks include:

- Developing a project proposal;
- Making a presentation of the project to the class during the last week of the semester (all group members must participate and play a substantive role in the presentation);
- Completing and submitting the project by its deadline.

The topic of your group project should be drawn from the history of performances of scientific knowledge, including the contemporary world. If there is a course topic you would like to revisit in greater detail it could become the subject of your project. If you'd like to go beyond the scope of the course to other kinds of performances that could be discussed in the analytical terms of the course, that could work also.

The form and organization of the project will be entirely up to your group. You may do a traditional project in paper form. On the other hand, if you'd prefer to do an audio project, a performance, a video project, or a digital design project of some kind (e.g., a game or a website), or a multimedia project, that would be fine, too. I welcome your creativity. The most important thing is that all members of the group agree on the parameters of the project, that each one can make a substantial contribution, and that each one's contribution is defined clearly. Regardless of the form the project takes, it should reflect careful thinking about a well-defined topic, incorporate any necessary research (including citations of sources), and involve detailed analytical discussion of specific performances.

The final project will be due by 11:55 PM on 10 December. If possible, it should be uploaded to T-Square. If it is in a form that does not lend itself to uploading, we can negotiate a different form of submission.

Please note: the proposal, presentation, and final project collectively make up the Group Project. I will give you one grade for the proposal and another combined grade for the presentation and final project. All group members will receive the same grades.

The Communication Center

The Communication Center is located in Clough Commons, Suite 447. It is an excellent resource for any student (undergraduate or graduate) who wants help with a communication-related project. You can visit the center for help at any stage of the process for any project in any discipline. The knowledgeable and friendly tutors are available to help you develop and revise your projects. They are not available to "fix" your projects. Please do not ask the tutors to proofread or edit your projects. For information on making an appointment please visit this website: <http://communicationcenter.gatech.edu/content/make-appointment>. If you need assistance with the appointment system, you can call 404-385-3612 or stop by the center. All services are free and confidential.

Students With Disabilities

Any student who feels that he/she may need an accommodation for any sort of disability, please make an appointment to see the instructor during office hours. Students with disabilities should also contact Access Disabled Assistance Program for Tech Students (ADAPTS) to discuss reasonable accommodations. For an appointment with a counselor call (404) 894-2564 (voice) / (404) 894-1664 (voice/TDD) or visit Suite 210 in the Smithgall Student Services Building. For more information visit the following website: <http://www.adapts.gatech.edu/>.

Academic Honesty

All work you turn in for this class must be your own work, with all outside reference sources properly cited and acknowledged.

The "Student Conduct Code of the Rules and Regulations" (Georgia Institute of Technology General Catalog, Section XIX) states, "Academic misconduct is an act that does or could improperly distort student grades or other student academic records" and offers the following descriptive list:

- Possessing, using, or exchanging improperly acquired written or verbal information in the preparation of any essay, laboratory report, examination, or other assignment included in an academic course;
- Substitution for, or unauthorized collaboration with, a student in the commission of academic requirements;
- Submission of material that is wholly or substantially identical to that created or published by another person or persons, without adequate credit notations indicating authorship (plagiarism);
- False claims of performance or work that has been submitted by the claimant;
- Alteration or insertion of any academic grade or rating so as to obtain unearned academic credit;
- Forgery, alteration, or misuse of any institute document relating to the academic status of the student.

The Code continues, "While these acts constitute assured instances of academic misconduct, other acts of academic misconduct may be defined by the professor." Consult the Honor Code online at <http://www.honor.gatech.edu/> or in the General Catalog to remember your primary commitment to academic honesty. Students who engage in academic dishonesty may receive a 0.0 on the assignment or fail the course. In addition, the instance will be reported to the Dean of Students who may take further action.

General Policies

Unless stated otherwise, your work is to be submitted via T-Square. Your work is due by the stated deadline. You may contact me to request an extension on a deadline, though I do not promise to grant it. If you would like to request an extension, please do so significantly ahead of the deadline. I will not consider last-minute requests or retroactive extensions.

You are required to retain a copy of every assignment for the entire semester in case any problems should arise with T-Square. Please be vigilant about making certain that materials you posted actually appear. It is your responsibility to ensure that your material is present on T-Square at its deadline.

T-Square will accept your work for ten hours following the posted deadline. However, you will lose 10% of the assignment's point value for each hour or fractional hour past the deadline you submit it. For example, if an assignment is worth 20 points and you pass it in within an hour after the deadline, I will deduct two points from your grade. If you pass it in an hour after that, I will deduct four points, etc. This policy applies to both group and individual assignments.

I strongly recommend that you post your work significantly ahead of all deadlines. Remember: T-Square's clock is the only one that matters. T-Square is the final arbiter of when your work was submitted.

Please also make sure that the material you submit is what you want me to grade. Whatever is on the site at the deadline is what I will grade. I will not accept other versions past the deadline under any circumstance.

If you experience a legitimate problem with T-Square, please contact me by email immediately. Do not submit work by email unless I specifically ask you to do so.

I reserve the right to give extra assignments and quizzes, announced or unannounced.

Course Schedule

Like any syllabus, this is a starting point and is subject to revision. I will announce any further assignments or other changes in class, by email, and on T-Square. You should be prepared to discuss the materials designated for each date on that date and have the relevant texts with you in class. All readings are available as .pdfs on T-Square and are designated here by their authors.

I. Introductory Matters

We will begin by considering the three basic concepts of the course (science, technology, performance) and their relationships as we perceive them.

8/19 Introduction to the Course

8/21 Conversation: Connections Between Science and Performance

II. Historical Episodes in the Performance of Science

We will look at several examples of the performance of science primarily from the 14th through the 17th centuries. Among the issues to be considered are: the venues and audiences for scientific performances; the elements of such performances; the reasons for performing scientific knowledge; and the emergence of "scientist" as a performable social role.

II.1 The Anatomical Theater (14th – 17th Century Europe)

8/23 Background: Read Dear, 106-115 and Cook, 407-416.

8/25 Read Castiglioni and Findlen.

8/27 Read Wilson, 62-74.

8/29 Read Klestinec.

9/2 **Labor Day: No Class Meeting**

9/4 Read Ferrari, 50-74.

- 9/6 Read Ferrari, 74-106.
- 9/9 Read Wilson, 74-95.
- 9/11 Review Historical Development of Anatomical Theater.
- 9/13 We will examine in class some contemporary versions of anatomical theater, including medical school dissections and surgical videos. You may look away if you become queasy.

II.2 Early Experimental Science (17th Century England)

- 9/16 Background: Read Blair, Serjeantson 157-162, Smith, and Shapin, “The Man of Science.”
- 9/18 Read Shapin, “The House of Experiment.”
- 9/20 Continue Discussion.
- 9/23 Shapin and Schaffer (file named “Leviathan Ch. 2”). (You can also access this reading at http://www.stanford.edu/class/history34q/readings/ShapinSchaffer/ShapinSchaffer_Seing.html)
- 9/25 Continue Discussion of Shapin and Schaffer.
- 9/27 Review for First Quiz.
- 9/30 **First Quiz**

II.3 Fun With Electricity (18th Century Europe and Today)

- 10/2 Background: Read Crump and Bensaude-Vincent & Blondel.
- 10/4 Read Roberts. **Group Project Proposal Due.**
- 10/7 Read Bertucci.
- 10/9 Continue Discussion.
- 10/11 Read Mertens.
- 10/14 **Fall Break: No Class Meeting**
- 10/16 Please use this session and 10/18 to meet in your project groups either to refine your proposal or to begin work on the project.
- 10/18 As above.
- 10/21 Read Elsenaar and Schaa.
- 10/23 Complete Discussion.

III. Science and Cultural Performance: Darwin

As the figure most closely associated in the popular imagination with evolutionary theory, Charles Darwin's influence has impacted popular culture as much as science. We will examine several kinds of cultural performance that ripple out from Darwin and the ideas associated with him (or in some cases precede the popularization of evolutionary theory), including his own performance as a celebrity.

10/25 Background: Read Hodge and Bowler.

10/28 Continue Discussion.

10/30 Performing Darwin: Baba Brinkman's *The Rap Guide to Evolution*.

11/1 Read Browne.

11/4 Continue Discussion.

11/6 Read Goodall, "Missing Links." Please also look at the text of the play *Jocko, or The Monkey from Brazil* at <http://www.erbzine.com/mag18/jocko.htm>.

11/8 Read Browne and Messenger.

11/11 Read Auslander.

11/13 Read Goodall, "Varieties."

11/15. Continue Discussion of Goodall.

11/18 Contemporary "Delineators"

11/20 Contemporary "Delineators" Continued

11/22 Review for Second Quiz.

11/25 **Second Quiz**

11/27 No Class Meeting

11/29 **Thanksgiving Break: No Class Meeting**

12/2 Group Project Presentations

12/4 Group Project Presentations

12/6 Group Project Presentations

12/10 **Group Projects Due.**