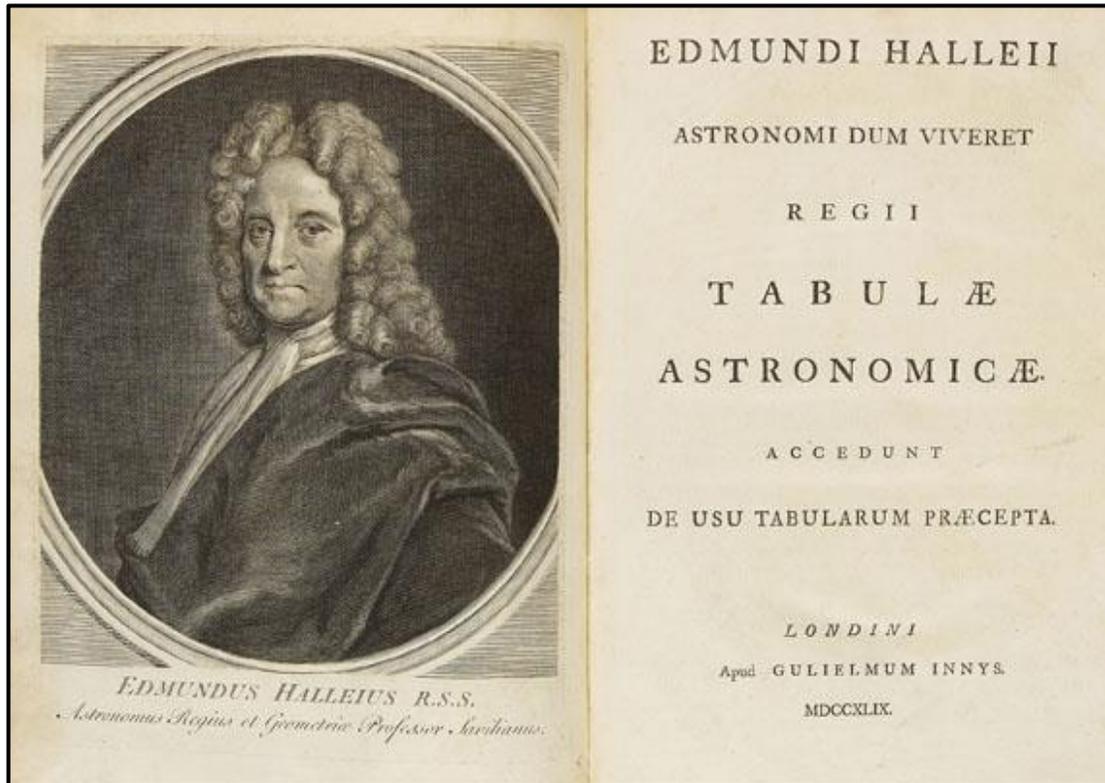


ENGL 1102

Invention, Exploration, and the Elements: The Rhetoric of Science from the 18th Century to Today



Writing and Communication Program
 School of Literature, Media, and Communication
 Georgia Institute of Technology, Short Summer 2019
 MTWR Section SF4 (12:30 – 2:20, Hall 103)

Dr. Courtney A. Hoffman
courtney.hoffman@lmc.gatech.edu / 009-15 Stephen C. Hall Bldg
 Office hours: MTWR 11:00 – 12:00, or by appt (June 19 – July 3)
 And via BlueJeans on Canvas (July 8 – July 24)

NB: EMAIL IS MY PREFERRED METHOD OF COMMUNICATION

Subject Line: Please begin every subject line for your email message with “ENGL 1102: Section #”

COURSE DESCRIPTION

The first mercury thermometer; the discovery of Uranus; miniaturization of clockworks; the leyden jar; carbonated water; the hot air balloon; gas lighting; vaccines – all of these are examples of scientific advancements and inventions made in the 18th century that are still important to both the study of the natural world and society today. Every innovation and invention that influences our lives in the 21st century has its roots in the scientific exploration of the past. 2019 is designated the International Year of the Periodic Table, celebrating 150 years since Gregor Mendeleev drafted the first version of the chart hanging in every Chemistry classroom across the world. But even before that design event in 1869, the 18th century was fulminating with the exploration of our planet and observable extraplanetary space. And, as Sam Kean writes in his book about

the history of the Periodic Table, *The Disappearing Spoon*, “No less than a scientific, there’s a social history of the elements” (203).

Using the Georgia Tech Writing and Communication Program’s WOVEN curriculum, students in this course will consider the rhetorical principles of communications about science, conduct individual and collaborative research projects into the social history of science from the 18th century to today, and engage in the design and creation of multimodal artifacts to convey what they discover. These artifacts will include: discussion posts, videos, wiki/blog pages, and their own periodic tables (of information other than the elements). Students will begin by reading Kean’s book, then delve into the history of many of the events, lives, and experiments he narrates. Whether it’s broadsides detailing predictions about solar eclipses throughout the 18th century, journals published by learned societies, or caricatures satirizing smallpox vaccines, this class will analyze media conveying scientific knowledge from the 18th century and design their own multimodal artifacts that do the same.



REQUIRED MATERIALS

*WOVEN*Text: *Georgia Tech’s Bedford Book of Genres*. Eds. Amy Brazillier, Elizabeth Kleinfeld.

eISBN: 9781319210083 (Access codes are available to purchase either through the bookstore or via the RedShelf website directly here: <https://redshelf.com/book/927224>).

The Disappearing Spoon. Sam Kean. ISBN: 9780316351637

Required supplemental readings available on Canvas.

***You may use digital copies of the texts we will be reading in class, if they are available. Just be sure you are able to take notes on what you have read – you should note anything interesting, confusing, or intriguing that you may wish to discuss in class.

COURSE GOALS – WOVEN Communication

In this course, you will learn how to think critically about and create multimodal artifacts that integrate a WOVEN (written, oral, visual, electronic, nonverbal) approach

to communication this means by the end of the semester, you will be able to:

- analyze written texts and produce thesis-driven writing that effectively conveys its purpose to the reader, is effectively structured, and is based on textual evidence;
- deliver oral performances using effective vocal emphasis and expression and effective pacing, and present research orally using voice mechanics to effectively convey your purpose to an audience, highlight main lines of argument and key pieces of supporting evidence, and structure your presentation so that it is easy to follow and engages your audience;
- analyze and interpret visual rhetoric, create artifacts that effectively employ visual rhetoric to tell a story and engage an audience, and design effective visual presentation aids for your electronic communications;
- create electronic presentations and artifacts that effectively use medium-specific affordances to tell a story and establish your ethos as a researcher;
- and expressively use nonverbal communication, including eye contact, facial expressions, body language, and gestures to engage an audience during oral performances.

I have designed this course in such a way as to allow you, the student, to develop your strengths and improve upon what you may perceive to be areas of weakness (that generally only need to be explored and then practiced!), while attaining desired outcomes universal to the Writing and Communication Program. They are:

PRIMARY LEARNING GOAL

- **Learning Goal A1: Communication.** Student will demonstrate proficiency in the process of articulating and organizing rhetorical arguments in written, oral, visual, and nonverbal modes, using concrete support and conventional language.

SECONDARY LEARNING GOALS

- **Learning Goal III: Critical Thinking.** Student will be able to judge factual claims and theories on the basis of evidence.
- **Learning Goal C: Humanities, Fine Arts, And Ethics.** Student will be able to describe relationships among languages, philosophies, cultures, literature, ethics, or the arts.

TECHNOLOGY

You will need to use your tech to access readings and for in-class work, so please be sure to bring what you need to participate fully to every class meeting. The library has tech that you may check out if you need it. Please visit <https://libguides.gatech.edu/gadgets> to reserve your equipment.



COURSE COSTS

Aside from the cost of your textbook, you may expect to pay for materials as needed when creating your artifacts for course assignments. Paper and Clay in the Student Center has supplies, and would welcome you. In addition, the CommLab has poster and 3D printers, and if you schedule a tutorial appointment with them, they may be able to help you make your artifacts, as well as give you advice and feedback on any stage of your design process (which I am of course happy to do, as well).

COURSE REQUIREMENTS

Over the course of the term, you will be required to be an active participant in class discussion, be an effective communicator within small groups (for example, when engaging in peer-review exercises), and participate in oral performances (i.e. presentations). You will produce a series of artifacts, both individually and as part of a group, that effectively communicate information you have gathered and analyzed regarding the 18th-century scientific community and current innovations in science today in greater depth. These include creating a biographical blog post for an 18th-century scientist individually; designing and producing a short video analyzing a scientific innovation individually; and designing a periodic table of scientists as a group project. You will also compile a reflective portfolio comprised of those artifacts created throughout the semester in place of a final exam.

For each assignment, I'll provide you with a detailed assignment sheet that includes assessment criteria well in advance. Unless I indicate otherwise, please submit assignments electronically via Canvas. Please format your written assignments according to MLA style guidelines (use in-text citations and a Works Cited page). Be sure to maintain a cumulative file (hard copy as well as computer file – just in case!) that includes all stages of your assignments in both draft and final versions. These will come in handy in the final weeks of the semester, since you'll compile your best work and examples that demonstrate improvement across drafts from these files for your reflective portfolio.

COURSE ASSIGNMENTS

The information below gives you details regarding the assignments and artifacts on which you'll be graded, and how those grades break down. I've also included the dates on which those assignments will be due.

Assignments	Deadline	Percentage
Participation – In-class	N/A	10%
Participation – Online	Varies	10%
Artifact 1: Biographical Blog Post	July 1	15%
Artifact 2: Scientific Innovation Video	July 10	20%
Artifact 3: Group Periodic Table Design Project	July 22	25%
Reflective Portfolio	August 1	20%
Total		100%

***** You must submit every part of every assignment as directed in order to pass this course. *****

Participation (20%) – W, O, V, E, N

In-Class (10%): You should expect to attend every class, and you should be prepared for that class meeting by reading the texts which will be discussed that day and completing any composition exercise that is due. The Writing and Communication Program has a program-wide participation policy. Active participation and engagement in class are required. If you have not done the reading and/or if you do not actively participate during the class period, you may be penalized for lack of participation. I define excellent participation as a student who comes to class prepared to engage in the conversation on a regular basis. Such preparation could include notations on the text to be discussed, such as a list of questions or concerns about the reading, or perhaps a matter of inquiry that is related to the reading. Don't forget that participation is part of your final grade in this class!

Online (10%): Because our class is designed as a hybrid course, you will be required to complete online assignments that will substitute for in-class discussion during the weeks when we will not be meeting face-

to-face. In order to receive full marks for participation for this part of the course, you must submit your discussion posts on time, punctually respond to your classmates' posts as assigned, complete the discussion board posts thoughtfully and with care, and be respectful of your classmates' time and input.



Artifact 1: Biographical Blog Post (15%) – W, O, V, E, N

For this artifact, you will choose a scientist from the 18th century, conduct research to gather information

about them, including their life; their work; their correspondents; and their influence, and design a blog post that will inform your audience about this person. I recommend that you choose a little-known scientist to learn about – or at least someone about whom you knew little – as you may gain knowledge, rather than reaffirming what you already know (for example, you might choose Caroline Herschel, rather than Edmund Halley or Sir Isaac Newton, or even her brother, William Herschel). You should consider that as a genre, blog posts are generally public facing, so you will want to construct your post in such a way as to reach a broad audience. Since blog posts are hosted electronically, you should consider the affordances of the medium you'll be working in and include elements of modes beyond the written.

Artifact 2: Scientific Innovation Video (20%) W, O, V, E, N

While learning about your chosen scientist for Artifact 1, you may have discovered some interesting innovations from the 18th century. Or you may be particularly interested in some cutting-edge technologies currently being explored. Or you may have learned about an 18th-century discovery that is the precursor to work being conducted in the 21st century (research in astronomy comes to mind as a possible field to explore

here). The 4-6 minute video you will create as your Artifact 2 should inform your audience about some innovation from either the 18th or 21st centuries that you find interesting, strange, or just fascinating. You should incorporate images, audio, film clips, and other elements of the medium in order to make a persuasive argument about your chosen innovation. You should produce a narrative that utilizes the affordances of video, keeping in mind that there are a wide variety of styles to consider when you're determining the message you want to convey.

Artifact 3: Group Design Project – Creating a Periodic Table (25%) W, O, V, E, N

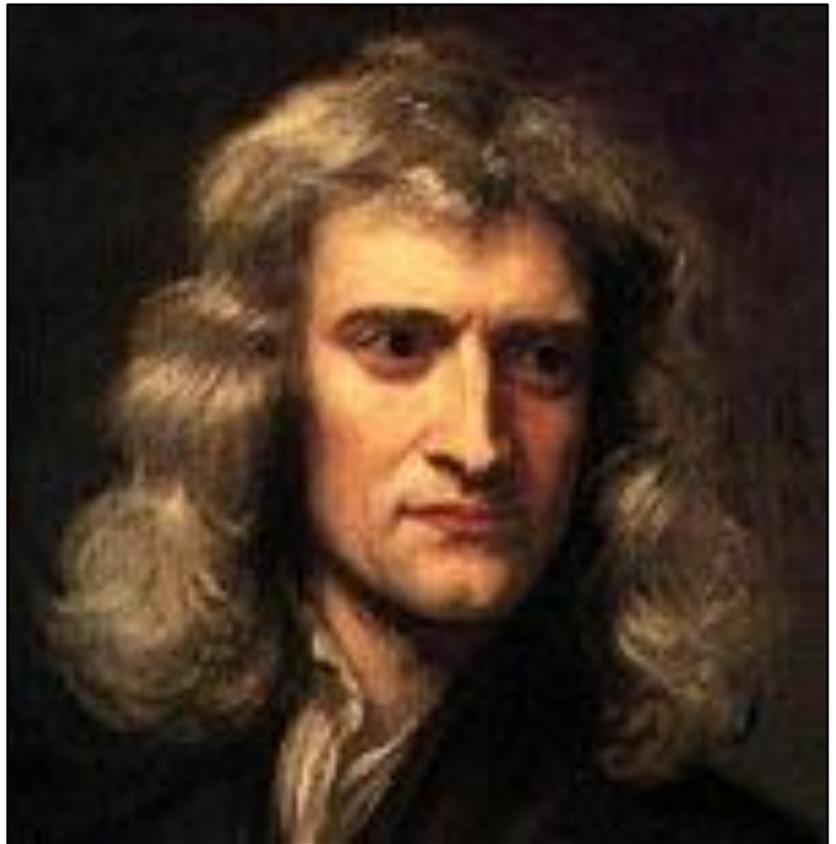
The inspiration for this course's theme comes from Sam Kean's book *The Disappearing Spoon*, which we'll be reading this term. As 2019 is designated the International Year of the Periodic Table, you'll be designing your own version of a periodic table – not of the elements, but of something else: scientists, discoveries, books, etc. Using the information you and your classmates discover (possibly as you created your previous artifacts), you will create a periodic table in a small group. You will need to consider what type of information you're organizing, how you will organize it, what the distinguishing features of that information is, whether you need to find more information to include, and what breadth of information you will include, as well as other decisions you'll need to make. You may want to construct a material object that is not as recognizable as the Periodic Table of Elements; this is not a requirement, but should your group decide to create a table that is tangible, you'll need to submit both the object/s AND a digital rendering (photos, video, design schematics, etc) so that I'll be able to assess your work remotely (as I will be in the UK when this artifact is submitted).

Reflective Portfolio (20%) – W, O, V, E, N

In lieu of a final exam, English 1102 requires that you complete a final reflective portfolio due during your section's scheduled final exam time (see course calendar below). The portfolio will include examples of your WOVEN work products, a substantial reflective essay, and brief introductions to each artifact. You will develop your portfolio throughout the semester and complete it during the Reading Period. I have scheduled time for you to work on the portfolio during class at the end of the term, and you should feel free to ask me questions or peer-review each other's work during that time.

COURSE POLICIES

Please read through the Writing and Communication Program's policies for all summer sections of ENGL 1102 [here](#). Below are summaries of and additions to these policies that are specific to this section of ENGL 1102.



Learning Outcomes and Evaluation Rubrics

Click on the following link, [Common Policies](#), to access the policies regarding Learning Outcomes and Evaluation Rubrics.

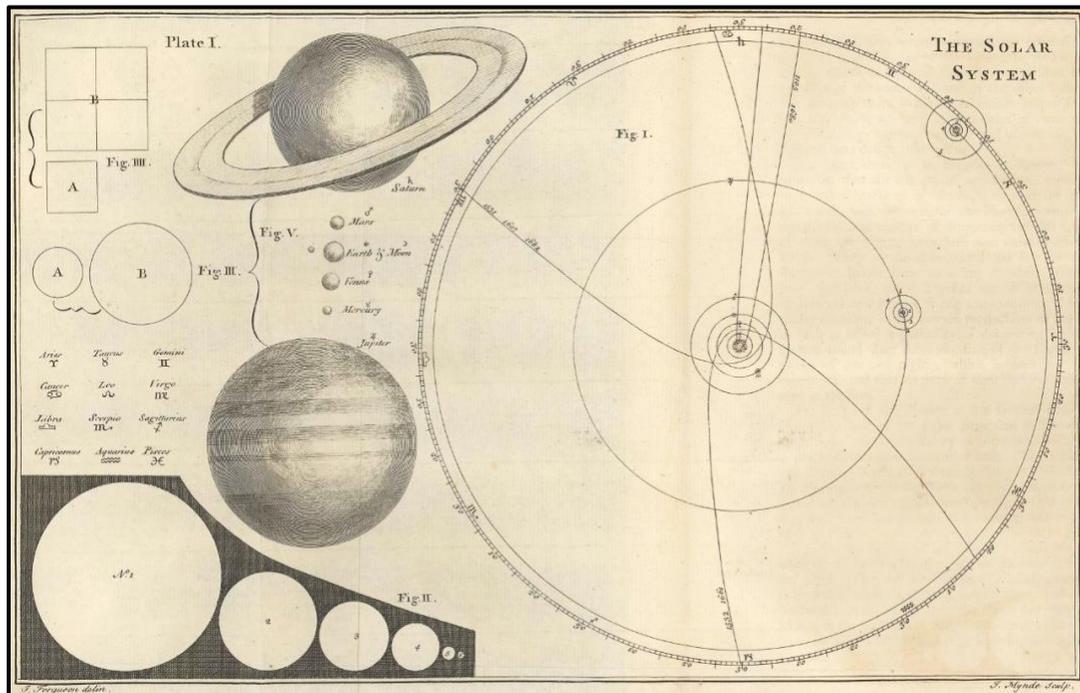
Attendance

The Writing and Communication Program has a Program-wide attendance policy which allows a specific number of absences without penalty, regardless of reason. After that, penalties accrue. Students may miss a

total of two (2) days over the course of the term without penalty. The attendance policy does not make any distinction about the reasons for your absences (except for religious observance, or in the case of Tech business or personal/family crisis, both with documentation from the appropriate Tech officials). Each additional absence after the allotted number **deducts 1/3 of a letter grade** from the student's **final grade**. **Missing four (4) days will result in automatic failure of the course.** Students are expected to keep up with their own attendance record and any missed work.

Classroom Matters

You should arrive on time to class. **For every three tardies, I will deduct 5 points from the student's final participation grade.** Please turn off your ringers and do not have your phones out (unless you need them to access the texts for the day – though I highly recommend different device for that). If you are sleeping in class, I will allow your classmates to determine a fitting way to awaken you. Please do not have food in the classroom, though you may have drinks with lids.



Late Work and Makeup Policy

Because many of the writing assignments in this class are meant to be shared and edited during class periods, it is essential that you complete drafts on time. If you miss a class period for whatever reason, it is up to you to find out what you missed that day (I suggest you ask a classmate) and complete the work assigned. However, should you have extenuating circumstances, I am prepared to grant reasonable extensions on final due dates for assignments (excluding the portfolio) **as long as you speak with me in advance**. If you have not cleared an extension with me (meaning I've responded to you), do NOT assume it has been granted. To make everything simple for us all, the best policy is to structure your work so you can stick to the original due dates. **I will subtract 5 points from your final artifact grade per day late.**

CommLab

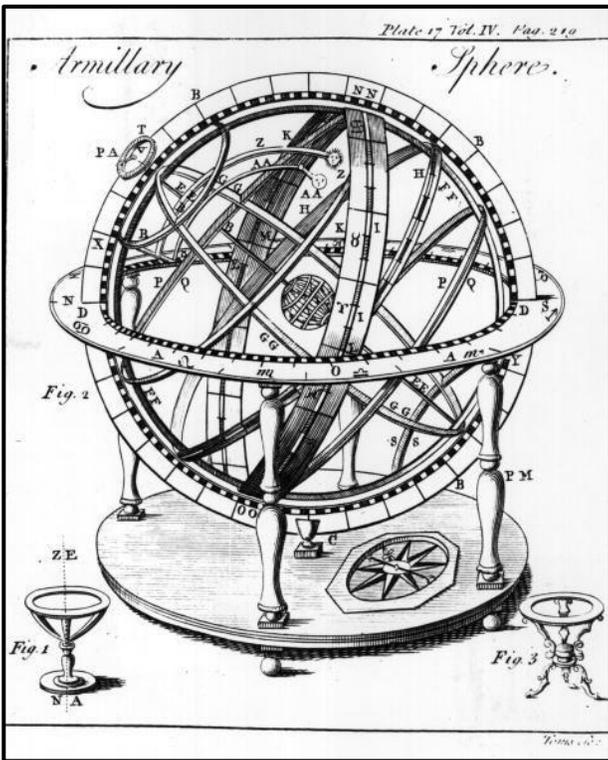
Georgia Tech's Naugle CommLab is located in Clough Commons, Suite 447. It is an excellent resource for all students (graduate or undergraduate) who want help with a communication-related project, from their multimodal assignments for ENGL 1101 and 1102 to graduate school applications, from engineering and science reports to oral presentations, from storyboards for videos to poster designs, from grant proposals to job cover letters and resumes. They can also match students with profession tutors especially trained to assist non-native English speakers. For more information or to make an appointment, visit their website:

<http://www.communicationcenter.gatech.edu>

Inclusive Excellence and Non-Discrimination Policy

The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society.

This class **does not discriminate** on the basis of race, color, class, age, religion, national origin, sexual orientation, gender, marital status, disability, or status as a veteran. Alternative viewpoints are welcome; however, statements that are deemed racist, sexist, homophobic, classist, or otherwise discriminatory toward others in the class or outside of it will not be tolerated. **Be aware of your audience!** We will be discussing a range of issues, hopefully generated from your own ideas and opinions. Not everyone will agree with everything you may say; **politeness, respect for others, and general good manners are absolutely required.**



Accommodations

Georgia Tech supports students through the Office of Disability Services. Any student who may require an accommodation for a documented disability should inform me as soon as possible or as soon as you become aware of your disability. Anyone who anticipates difficulties with the content or format of the course due to a documented disability should arrange a meeting so that we can create a workable plan for your success in this course. The Office Disability Services serves any Georgia Tech student who has a documented, qualifying disability. Official documentation of the disability is required to determine eligibility for accommodations or adaptations that may be helpful for this course. Please make sure I receive a Faculty Accommodations Letter form verifying your disability and specifying the accommodation you need. The Office of Disability Studies operates under the guidelines of Section 504 of the Rehabilitation Act of 1973 and the 1990

Americans with Disabilities Act (ADA). For more details, see the website: <http://disabilityservices.gatech.edu>

Academic Misconduct

One serious kind of misconduct is plagiarism, which occurs when a writer, speaker, or designer deliberately uses someone else's language, ideas, images, or other original material or code without fully acknowledging its source by quotation marks as appropriate, in footnotes or endnotes, in works cited, and in other ways as appropriate (modified from WPA Statement on "Defining and Avoiding Plagiarism"). **If you engage in plagiarism or any other form of academic misconduct, you will fail the assignment in which have engaged in the academic misconduct and be referred to the Office of Student Integrity, as required by Georgia Tech policy.** I strongly urge you to be familiar with these Georgia Tech websites:

Honor Challenge: <http://www.honor.gatech.edu>

Office of Student Integrity: <http://www.osi.gatech.edu/index/php/>

Process for reports of academic misconduct:

<http://www.osi.gatech.edu/plugins/content/index.php?id=15>.

I am more than happy to help you determine the proper way to cite your sources. Please set up a meeting with me to discuss citations – it's so much easier than being charged with plagiarism.

CALENDAR OF ASSIGNMENTS

*** *This course syllabus is a general plan for the course; deviations announced to the class in advance by the instructor may be necessary.*

Week 1 – Face to Face		
Wednesday, June 19	Introduction & Syllabus Review	
Thursday, June 20	Multimodality – Design, Affordances, Rhetoric, Genre	
	Reading Due: <i>WOVENText</i> Ch. 1-3, pp. 91-92, 102-103 Excerpt from <i>Milestones in the History of Science</i>	Writing Due: Return Statement of Understanding
ADD/DROP ENDS JUNE 20		
Week 2 – Face to Face		
Monday, June 24	Research – Experiments and Reporting Introduce Artifact 1	
	Reading Due: <i>WT</i> pp 390-393, 474-483 <i>The Disappearing Spoon</i> Ch. 1-3	Writing Due: Discussion Post Response
Tuesday, June 25	Broadsides – Astronomy and Citizen Science Library Introduction	
	Reading Due: <i>The Disappearing Spoon</i> Ch. 4-5 “Ephemeral Events” “Halley’s Eclipses”	Writing Due: Discussion Post Response Identify Scientist
Wednesday, June 26	Science in Poetry	
	Reading Due: <i>The Disappearing Spoon</i> Ch. 6-7 Poems from Barbault, Thomson, and White <i>WT</i> pp. 498-500	Writing Due: Discussion Post Response Image Gallery Due
Thursday, June 27	Peer Review	
	Reading Due: <i>The Disappearing Spoon</i> Ch. 8-9 <i>WT</i> Ch. 5	Writing Due: Discussion Post Response Draft 1 Artifact 1
Week 3 – Face to Face		
Monday, July 1	Peer Review Artifact 1 Introduce Artifact 2	
	Reading Due: <i>WT</i> pp. 325-334, 380-390	Writing Due: Draft 2 Artifact 1 Artifact 1
Tuesday, July 2	Collaboration via Correspondence	
	Reading Due: <i>The Disappearing Spoon</i> Ch. 10-12 Selections from Priestly Letters	Writing Due: Discussion Post Response

Wednesday, July 3	Film Design iMovie Tutorial	
	Reading Due: <i>The Disappearing Spoon</i> Ch. 13-14	Writing Due: Discussion Post Response Image Gallery Due Script Draft Due
Thursday, July 4	NO CLASS – INDEPENDENCE DAY HOLIDAY	
Week 4 - Distance		
Monday, July 8	Collaboration via Correspondence	
	Reading Due: <i>The Disappearing Spoon</i> Ch. 15-17 Selections from White Letters	Writing Due: Discussion Post Response Storyboard Due
Tuesday, July 9	Peer Review	
	Reading Due:	Writing Due: Draft 1 of Artifact 2
Wednesday, July 10	Peer Review Introduce Artifact 3	
	Reading Due: WT pp. 364-367, 422-434 Excerpt from <i>The Periodic Table</i>	Writing Due: Draft 2 of Artifact 2 Artifact 2
Thursday, July 11	Journals	
	Reading Due: <i>The Disappearing Spoon</i> Ch. 18-19 Articles in <i>Philosophical Transactions</i> Royal Society History of Publication	Writing Due: Discussion Post Response
WITHDRAWAL DEADLINE JULY 14		
Week 5 - Distance		
Monday, July 15	Science in Fiction <i>Gulliver's Travels</i>	
	Reading Due: Excerpt from Swift Scerri Articles	Writing Due: Discussion Post Response Project Proposal Due
Tuesday, July 16	Science in Fiction <i>Frankenstein</i>	
	Reading Due: WT pp. Excerpt from Shelley	Writing Due: Discussion Post Response
Wednesday, July 17	Science in Fiction <i>Frankenstein</i> Graphic Novel	
	Reading Due: WT pp. 498-498 Excerpt from Shelley Graphic Novel	Writing Due: Discussion Post Response Draft 1 of Periodic Table

Thursday, July 18	Group Work	
	Reading Due: WT Ch. 20	Writing Due: Draft of Group Artist's Statement
Week 6 - Distance		
Monday, July 22	Introduce Portfolio	
	Reading Due: WT pp. 95-102 Portfolio Assignment Sheets	Writing Due: Artifact 3
Tuesday, July 23	Portfolio Work	
Wednesday, July 24	Portfolio Work	
FINAL PORTFOLIO DUE		
Thursday, August 1	Portfolio due at NOON on Canvas	
GOOD LUCK ON FINALS AND ENJOY THE REST OF SUMMER BREAK		

Statement of Understanding

Please read, sign, and return this statement to COURTNEY HOFFMAN by Thursday, June 20 (or the next class period after your first day in the course, if you add later).

I affirm that I have read the entire syllabus and Common Policies for English 1102 and understand the information and the responsibilities specified.

Print full name

Legible signature

Date

DIRECTIONS: Read carefully and check all that apply.

- I give my instructor, **COURTNEY HOFFMAN**, permission to use copies of the work I do for this course, **ENGL 1102**, as examples in presentations and in print and electronic publications.
- I do not want my work used as examples in any situations.

If you give permission for your work to be used, please indicate how you want to be acknowledged:

- Please acknowledge me by my full name
- Please use my work, but do not acknowledge me by name.

The following information enables me to contact you if your work is used.

Print full name

Legible signature

Print permanent home address

Print campus address

Cell and home phones

School and home email addresses

Date