

Rhetoric and Communication: Science

Fall 2019 Course Syllabus & Policies

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Office hours: Tuesday (B-Day) 10:00 – 11:00 am or by appointment

Course Description:

Science has shaped the nature of the 21st century world, and every day marks the passage of a new development, innovation, or discovery. But how does the world understand the science that shapes it? And how has the reality of the Internet Age altered the way science is expressed and received?

This course is aimed to address these questions as students explore the way scientific knowledge is conveyed to diverse groups. Students will analyze and produce forms of communication designed for expert and popular audiences and will examine the influence science communication has on culture and policy. In so doing, students will recognize why scientists follow certain conventions in relating their works through peer-reviewed publications and how journalists might present science in a headline for NPR. The class will also consider communication in diverse formats, ranging from professional podcasts to visual exhibitions at the local museum. Consequently, students will develop a range of skills that will help them translate complex ideas to fit a variety of needs. In pursuing these aims, students will conduct ongoing research on a topic of personal interest that pertains to the UN Sustainability Goals and other concerns surrounding human health and the environment.

Meeting Days/Times

Time	Room	Schedule
11:00 – 11:55am	A138	A, C, D

Required Materials

Textbooks

Readings to be provided electronically in class.

Additional Materials

Additional readings and supplementary texts will be provided electronically through Moodle and as printed handouts.

SSLs and Outcomes

This course will focus on a range of concepts central to the English team learning standards, and the SSLs but most particularly:

IA. Students are expected to demonstrate automaticity in skills, concepts, and processes that enable complex thought by:

- completing homework activities and assigned reading to support content,
- applying content knowledge with novel scenarios and problems.

IB. Students are expected to construct questions, forge connections and deepen meaning

- informally in discussion groups, during project design

ID. Students are expected to evaluate the soundness and relevance of

information and reasoning

- by evaluating sources for their projects
- through explanation of models of phenomena in biology

IIA. Students confront misconceptions

- by writing and creating projects tailored to a variety of audiences
- by evaluating the discourse surrounding controversial science topics

IIIA. Students use appropriate technologies as extensions of the mind

- through daily use of computers, including web sources and videos
- by using the course website as a resource

IIIC. Students recreate models and systems in biology, such as immune memory and viral replication cycles

- with classroom discussion, projects, and assessments

VB. In order for students to make reasoned decisions which reflect ethical standards, and act in accordance with those decisions, students

- are made aware of what plagiarism is, its ethical implications, and repercussions of plagiarizing,

Additionally, students will:

- Engage in independent inquiry into a specific scientific topic of their choosing.
- Research key conventions of scientific writing.
- Analyze the movement of information between discourse communities.
- Apply storytelling and narrative concepts to help facilitate the communication of science.
- Examine the impact of popular communication as it applies to the public reception of science and the development of policy.

Instructional Design and Approach

This course will provide students with an opportunity to engage in extensive literature research into a biological problem of interest that is centered on human or environmental health. Based on their research, students will generate a proposal that outlines 3 aspects of their problem that they would like to work on throughout the semester. During their research process, students will also explore different genres of communication. Students will integrate the skills they have learned to communicate their science through a variety of group and individual projects (see below).

Student Expectations

Participation

We want this class to be based on your questions and discussions about them. Students should arrive to class prepared having actively read any assigned readings and having completed any additional tasks. Students will also seek out help during office hours on major projects and essay assignments and be in frequent contact with the instructors.

Academic Honesty and Plagiarism Policy

Academic dishonesty and plagiarism are unacceptable and will be dealt with as per IMSA policy on academic dishonesty. Plagiarism includes, but is not limited to, knowingly using another person's work – whether it is a student or a research paper – as your own, improper citations and bibliographic information, improper use of secondary sources, or any other behavior that is deemed dishonest.

Laptops

The default position for your laptop in this class is closed. This means, from the

moment class starts, unless we ask you to use it, have your laptop packed away and out of view. We will use the laptops frequently for in-class work and research and even for online readings, but to the greatest extent possible, this will be a laptop-free class.

If you have a special need that requires accommodation in this area, please see me.

This policy likewise extends to all electronic devices such as phones, tricorders, telegraphs, etc.

Group Work

Much of the class content will ask you to work with a chosen group of your peers. You are expected to make equal contributions to any project or writing assignment that requires collaboration. If you find that a member of your group is not contributing a fair measure of time and effort, please contact us with your concerns. Nevertheless, your group is equally responsible for the final submission of your work and will share its assessment.

Late Work

The timely submission of your work is essential to ensure that we are able to provide timely feedback on your assignments.

Students may submit work late with a penalty of 10% each day the assignment is late up to 3 calendar days maximum. Once the deadline has passed, a 0 will be assigned.

It is expected that the students communicate with their instructor if they are making use of this policy for extended time on assignments.

Computer problems of any kind (including document corruption, hard drive

failure, problems with uploading to Moodle) will not be treated as acceptable excuses. This being the case, it would be wise to make a backup copy of any computer work that you do for this course, and we suggest double checking any online submission. However, if you are having problems getting your work in, it is still recommended that you talk with your teacher.

Assessment Practices, Procedure, and Processes

Grade Scale

Your grade will be weighted as follows:

Major Assessments (Essays) and Projects – 65%

Homework/Daily Work – 20%

Participation – 15%

English Department Grading Guide

A = Exceeds course requirements (90-100%)

B = Meets course requirements (80-89%)

C = Credit awarded but needs improvement (70-79%)

D = Does not meet course requirements.

Late Work Policy

Major essay assignments are always submitted electronically. As such, the electronic submission method will determine whether an essay is late. It is your responsibility to make sure that an essay is submitted on time. Technological mishaps, faulty hard drives, viruses, and other events will not be considered valid excuses. For example, if an assignment is due at 12:00 am and it is submitted at 12:01 am, it is considered a day late because it was submitted after the deadline. In other words, if the online submission platform flags the

assignment as late, it is late.

As mentioned above, students may submit work late with a penalty of 10% each day the assignment is late up to 3 calendar days maximum. Once the deadline has passed, a 0 will be assigned.

Grade "Bumping"

Officially, the English Department does not round or "bump" quarter or semester grades, and this class adheres to this policy. Please do not contact us at the midterm or near the end of the semester with requests to increase a grade.

Policies and Expectations

Winning Strategies for Students

CONSISTENT ATTENDANCE AND PARTICIPATION

All students should be prepared and on time for class. The most effective students will use their enrollment as an opportunity to expand their knowledge about a variety of skills and to improve their ability to write.

EFFORT IN WRITING

Your best writing is never a product of procrastination and a rushed submission. We expect that every major assessment you submit is the product of multiple drafts and extensive revision (appropriate to the time given to complete the assignment). Final submissions should be carefully reviewed and proofed and should follow all documentation rules unless otherwise stated.

RESPECTFUL BEHAVIOR

This is a learning environment, and the class is made up of your peers and colleagues. As such, you will always treat your classmates with the utmost

respect and courtesy. This is especially important when working in groups both in class and outside of it. Likewise, we expect to receive the same consideration and should be referred to in our preferred fashion.

Faculty Expectations

GUIDANCE AND SUPPORT

We're here to help you, and yes, we want you to do well in the class. Never be afraid to ask questions or approach us for advice or extra help. Email is a fantastic way to contact us outside of class and you can always make an appointment to see us during our office hours. But remember, we expect you to take ownership of your education. If you're confused, talk to us. If you need clarification on an assignment, ask.

FLEXIBILITY AND RESPECT

Just as we expect you to treat each other with interest, compassion, and civility, we strive to do the same for you.

HIGH STANDARDS

Grades in my class are not "given," they are **earned**. At IMSA a "B" means that you have met expectations for a class. A "C" grade means that you did not meet expectations, and an "A" grade means you exceeded expectations. We are happy to spend time with you helping you improve your performance and meet the standards you set for yourself.

Sequence of Topics and Activities¹

Unit I, Weeks 1-5: Topic Primer and Communication Overview. Students will

¹ This is a tentative schedule for the class. All topics and activities are subject to change pending our decisions during class. In the case of any changes, you will be notified in a timely manner during the semester.

investigate different forms of scientific communication with specific attention to how content changes based on the needs of an audience. To accomplish this goal, students will participate in an overview of core scientific concepts and analysis of relevant scientific literature.

Unit II, Week 6-7: Topic Proposal. Students will be tasked with research a topic related to human health and environment. Students will connect justify the significance of their research by connecting their topic to a UN Sustainability Goal.

Unit III, Weeks 8-10: Specialized Audience. This unit will showcase formal visual communication intended for an expert audience (visual abstracts, graphs, tables). Students will be asked to produce a selection of forms related to their topic.

Unit IV, Weeks 11-13: General Audience. This unit will explore different forms of communication intended for a broad audience with an added emphasis on non-traditional or alternative forms of communication.

Unit V, Weeks 14-16: Science Policy. This unit will examine the development of science policy on a global/national scale and ask students to make predictions based on research and evaluation.