#### INQ300 Science Reporting Syllabus

Instructor: Dr. Durell Bouchard Office Hours: by <u>appointment</u> Office: Trexler 365-C E-Mail: <u>bouchard@roanoke.edu</u> Phone: 375-4901

# **Course Objectives**

The news is full of science stories, from announcing a new cancer drug to arguments for and against genetically modified foods. How can the science in these news stories be protected from cultural, political, and financial pressures? How can reporters compensate for readers' lack of interest or scientific background without sensationalizing their stories? As science plays an increasingly prominent role in our modern lives, we need to develop ways for the media to convey accurately scientific information to the public.

In this course, we will examine the problems with how science is presented in the news, and work toward a solution to a specific aspect of these problems within the context of a related news story.

Intended Learning Outcomes: At the end of the course, the successful student will be able to:

- 1. Apply their research findings to a formal project addressing the course topic question and successfully present this proposal in an oral defense.
- 2. Write well-organized and clearly reasoned papers both individually and with a group. Papers will have clear theses, effective organization, and a minimum of sentence-level errors.
- 3. Contribute to meaningful, effective discussion and collaborative work that includes expressing, listening to, and debating ideas.
- 4. Be able to apply critical thinking and quantitative reasoning skills in a meaningful way.
- 5. Make explicit, meaningful connections between past course work (both in the core curriculum and in their majors) and contemporary issues.
- 6. Demonstrate understanding of a contemporary issue or problem, an awareness of the types of inquiry needed to understand it, and the resources required for addressing it.
- 7. Read a news article about a scientific topic and:
- a. Evaluate the scientific and reporting methods used.
- b. Identify and supply any missing information.
- c. Recognize and correct any misleading presentation of the information

d. Assess the validity of the article's conclusion.

## **Course Content**

Prerequisites: All 100 and 200-level INQ course requirements should be completed.

Text: A Writer's Reference: Roanoke College Custom Edition, by Diana Hacker.

**Course Structure**: During the first part of the semester, we will meet as a class to work through the stages of an example project. We will split into groups for the final project and presentation at the end of this section.

During the second part of the semester, the groups will have individual meetings with me to discuss their group's project. We may have a few sessions with multiple groups or with the whole class if needed.

**Class Participation**: During the first part of the course, while we work on our sample project, you will need to come prepared and willing to contribute to the class's discussion and progress. There will be many ways to do this, including working in small groups during class time, presenting your group's ideas to the class, and joining class discussions. Of course, you need not do all of these things, but you need to do some of them.

**Group Article Presentations**: After selecting articles relating to our sample project, you will be assigned an article or articles to read. While reading, you will also identify any questions or areas of scientific background you feel need to be further researched. Finally, your group will present this information to the class.

**Individual Paper**: You will learn about some of the scientific background needed to understand our sample project and its news story and write up your results in a paper.

**Group Solution Assessment**: In small groups, you will assess one of the solutions to our example problem brainstormed by the class. Your group will decide whether or not to support that solution and write a paper supporting your conclusion. Finally, your group will present your assessment to the class.

**Self-reflection Paper**: This is a short paper where you will reflect on your roles during the two group assignments and in-class groups. You will describe what your strengths and challenges as a group member are. We will share these self-reflections to help us choose our groups for the final project.

**Self-evaluation Log**: During the second part of the course, you will write periodic self-evaluations of yourself and your group. These will help us work through any problems that may arise.

**Final Paper**: In groups, you will identify a problem with the way scientific content is presented in popular news media, propose a solution to that problem, and support your proposal. This paper integrates all the stages of our sample project during the first part of the class. And it showcases your ability to research, write, and present as you have learned in the INQ curriculum.

**Final presentation**: As a group, you will present your problem and proposed solution in an oral defense. Each group will give a practice defense in front of another group and provide feedback to the group whose practice defense they attend.

**Important Dates**: We will have four presentations whose dates are listed below. If you have a conflict with one of these dates, please email me ASAP.

Presentation	Date
Article Presentations	Tue, Sep 14
Solution Assessment Presentations	Thu, Oct 7
Practice Final Presentations	Tue, Nov 30 and Thu, Dec 2
Final Presentations	Mon, Dec 13 (8:30 AM - 11:30 AM)

Grading: Course grades are assigned based on the following weights and scale:

Grade Weights

Category	Weight	
Class participation	10%	
Group article	5%	
presentations	5%	
Individual paper	10%	
Group solution	15%	
assessment		
Self-reflection paper	5%	
Self-evaluation log	10%	
Final Paper	25%	
Final Presentation	20%	
Grade Scale		

Grade	Range	Grade	Range
А	93-100	С	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
В	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	0-59

### **Course Policies**

Attendance Policy: If you have a temperature of 100.4 or higher or other COVID symptoms, do not come to class. Call Health Services IMMEDIATELY. Do not come to class or go to any public area on campus. For your absence to be excused, you must permit Health Services to notify me that you have consulted them about COVID symptoms. If Health Services informs you that you should isolate and not attend the class for multiple days, tell me so we can make a plan to keep you current in the course. All absences caused by consultation with Health Services about coronavirus symptoms or isolation ordered by Health Services will be excused. Still, you will need to do the work and graded assignments even if we extend your deadline.

Class attendance is expected. If you do have to miss class, you are responsible for learning all material covered that day and making arrangements in advance with your group to compensate for your absence. If you have not discussed your absence with me beforehand, you will be unable to make up any work missed, and it will adversely affect your class participation grade.

**Masks**: The College has issued a mask mandate for the semester that requires masks to be worn in common indoor spaces such as our classroom. You must wear a mask in this class. If you arrive without a face covering, you will not be allowed to stay and may lose credit for attendance or in-class work. The Bookstore sells masks if you need to make a quick purchase.

**Late Policy**: Unless otherwise specified, assignments are to be turned in before class start on the due date. If you anticipate being unable to meet a deadline, email me before the deadline to request an extension. Unexcused late work will receive no credit.

Academic Integrity: I expect everyone to follow the Academic Integrity policy detailed in the handbook <u>Academic Integrity at Roanoke College</u>. If you ever have questions about how these policies apply to our class, please contact me. The bottom line is that all work you submit for a grade must be solely your own unless explicitly stated as group work.

**Writing Center**: The Writing Center @ Roanoke College, located on the Lower Level of Fintel Library (Room 15) offers free tutorials focused on writing projects and oral presentations for students working in any field. Writers and presenters at all levels of competence may visit the Writing Center at any point in their process—including brainstorming, drafting, organizing, editing, or polishing presentation skills—to talk with trained peer tutors in informal, one-on-one sessions. The Writing Center is open Sunday through Thursday from 4 to 9 PM. Simply stop in, or schedule an appointment at <www.roanoke.edu/writingcenter>. Questions? Email writingcenter@roanoke.edu or call 540-375-4949.

Accessible Education Services: Accessible Education Services (AES) is located in the Goode-Pasfield Center for Learning and Teaching in Fintel Library. AES provides reasonable accommodations to students with documented disabilities. To register for services, students must self-identify to AES, complete the registration process, and provide current documentation of a disability along with recommendations from the qualified specialist. Please contact Becky Harman, Assistant Director of Academic Services for Accessible Education, at 540-375-2247 or by email at <u>aes@roanoke.edu</u> to schedule an appointment. If you have registered with AES in the past and would like to receive academic accommodations for this semester, please contact Becky Harman at your earliest convenience to schedule an appointment and/or obtain your accommodation letter for the current semester.

**Diversity**: I consider this classroom to be a place where you will be treated with respect, and I welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class.

**Preferred Name/Pronoun**: I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester to make appropriate changes to my records.

# **Course Schedule**

Day	Торіс	Assignment
Part 1		
Thu, Sep 2	Intro to course, Intro to sample problem, Choose topic	Idividual: Find articles assigned
Tue, Sep 7	Talk about assessing articles/group work, Form first groups	Idividual: Articles due, Group: Article presentations / Science questions assigned
Thu, Sep 9	Work on presentations	
Tue, Sep 14	Article presentations	Group: Science questions due
Thu, Sep 16	Talk about presentations/groups, Choose science questions to answer	Individual: Science paper assigned
Tue, Sep 21	Work on papers	
Thu, Sep 23	Share science info, Brainstorm solutions, Presentation rubric, Form second groups	Individual: Science paper due, Self- reflection paper assigned, Group: Solution assessment assigned
Tue, Sep 28	Work on solution assessments	
Thu, Sep 30	Meet with groups to discuss progress	
Tue, Oct 5	work on solution assessments	
Thu, Oct 7	Solution assessment presentations	Group: Solution assessment paper due

This course expects you to spend at least 12 hours of work each week inside and outside of class.

Day	Торіс	Assignment
Tue, Oct 12	Share self-reflections, Form final project groups	Individual: Self-reflection paper due, Group: Final project topic/news story assigned
Part 2		
Thu, Oct 14	Meet in groups about topics/news stories	Group: Final project topic/news story due, Individual: Evaluation form due
Fall Break		
Tue, Oct 26	Meet in groups to assess sources	Group: Bibliography due, Individual: Evaluation form due
Thu, Oct 28	Meet in groups to discuss solution proposal	Group: Solution proposal due, Individual: Evaluation form due
Tue, Nov 2		
Thu, Nov 4		
Tue, Nov 9		Group: First paper draft due
Thu, Nov 11	Meet in groups to discuss paper drafts	Individual: Evaluation form due
Tue, Nov 16		
Thu, Nov 18		Group: Second paper draft due
Tue, Nov 23	Meet in groups to discuss paper drafts	Individual: Evaluation form due
Thanksgiving Break		
Tue, Nov 30	Practice final presentations	
Thu, Dec 2	Practice final presentations	
Tue, Dec 7		
Thu, Dec 9	Meet in groups to discuss presentations	Individual: Evaluation form due
Mon, Dec 13 (8:30 AM - 11:30 AM)	Final presentations	Individual: Summary evaluation form due, Group: Final project due