## INQ 300: Science Reporting: Getting the whole story

Dr. Hannah Robbins Trexler 270H, x4906, robbins@roanoke.edu (email is the best way to reach me)

Office Hours Monday 10 am - noon, Tuesday and Thursday 11:45 am — 1 pm, or by appointment.

Course Description

From the announcement of a new cancer drug to arguments for and against genetically modified foods, the news is full of stories about science. 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 large role in our modern lives, we need to develop ways for scientific information to be conveyed accurately to the public by the media.

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.

Learning Outcomes By the end of this course, successful students will be able to:

- Apply their research findings to a formal project addressing the course topic question and successfully present this proposal in an oral defense
- 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.
- Contribute to meaningful, effective discussion and collaborative work that includes expressing, listening to, and debating ideas.
- Be able to apply critical thinking and quantitative reasoning skills in a meaningful way
- Make explicit, meaningful connections between past course. work (both in the core curriculum and in their majors) and contemporary issues
- 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
- Read a news article about a scientific topic and:
  - \_ Evaluate the scientific and reporting methods used
- Identify and supply any missing information
- Recognize and correct any misleading presentation of the information \_ Assess the validity of the article's conclusion

Course Materials

Lies, Damned Lies, and Science Seethaler, A Writer's Reference Hacker, RC custom edition

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.

Group article presentations

Group solution assessment presentations

Thursday 1/26, in class
Tuesday 2/21, in class

Practice Final Presentations Thurs. & Tues. 4/13 & 18, in class Final Presentations Thursday 4/27, 8:30—11:30 am

Course Grades

The final course grade is determined in the following way:

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

A grade scale will be determined after final grades are computed, but will be 110 worse than the scale given below.

	B+88-89	C + 78 - 79	D+ 68-69	
A 92-100	В 82-87	C 72-77	D 62-67	F 0-59
A- 90-9	B-80-81	C- 70-71	D- 60-61	

Course Structure

During the first part of the semester, we will meet as a class to work through the stages of an example project. At the end of this section the class will be split into groups for the final project and presentation.

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 meetings 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 to class prepared and willing to contribute to the class' 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, joining class discussions, and locating relevant sources and information for our project. You need 110t do all of these things, but you need to do some of them.

Group article presentations After we have selected articles relating to our sample project, you will be assigned an article or articles to read. While reading, you also identify any questions or areas of scientific background you feel need to be further researched. 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. (Remember that our goal is to reach a "National Geographic" level of scientific understanding.)

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 will write a paper supporting your conclusion. Your group will present your assessment to the class.

Self-reflection paper This is a short paper where you will reflect on the roles you played during the two group assignments and ill-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 ill popular news media, propose a solution to that problem, and support your proposal. This paper will put together all the stages covered in our sample project during the first part of the class and showcase your ability to pull together all your research and writing skills learned in the rest of the INQ curriculum. (These papers will be archived by the General Education Office.)

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 will also be responsible for giving feedback to the group whose practice defense they attend.

Attendance Policy

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.

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

Extra Resources

To get extra help with writing and presentations, visit the writing center ill Fintel Library SundayThursday 4-9 pm.

Special Needs

If you have a disability that may require an accommodation ill this course, please provide me with your documentation within the first 2 weeks of the semester. I must have your documentation at least, 48 hours prior to any accommodation made. (Check with the Center for Teaching and Learning for their scheduling guidelines.)

Academic Integrity

I expect all of you to follow the Academic Integrity policies of Roanoke College. All graded work should be your own work! If you ever have questions about how these policies apply to our class please contact me. Any violations of these policies will automatically be turned over to the Academic Integrity Council.

## Course Schedule

The following schedule is approximate and subject to change. It should give you an idea of the timing of the topics covered and assignments. (Assignments marked "l" are individual, those marked "G" will be done ill groups.) Note that some class days do 110t appear 011 the schedule - these are days with no class meetings and nothing due.

Day	Topic	Assignments (due date
Part 1		
Tu J 17	Intro to course, Intro to sample problem, Choose news story	I: Find articles, Read Chap. I
Th J 19	Talk about assessing articles/group work, Form 1st groups	I: Articles due, Read Chap. 2
		G: Article presentations/science Q's assigned
Tu J 24	Work on presentations	1: Read Chap. 3
Th J 26	Group article presentations	I: Read Chap. 4, G: Science Q's due
Tu J 31	Talk about presentations/groups, Choose science Q's to answer	I: Science paper assigned, Read Chap. 5
Th F 2	Work on papers	I: Read Chap. 6
Tu F 7 Sha	re science info, Brainstorm solutions, Form 2nd groups	l: <b>Science paper due</b> , Self-reflection paper assigned, Read Chap. 7, G: Solution assessment assigned
Th F 9	Create presentation rubric/Work on solution assessments	1: Read Chap. 8
Tu F 14	Meet w groups to discuss progress	1: Read Chap. 9
Th F 16	Work on solution assessments	

Tu F 21	Group solution assessment presentations	G: Solution assessment paper due
Th F 23	Share self-reflections, Form final project groups	I: Self-reflection paper due
		G: Final Project topic/news story
Part 2		
Tu F 28 Meet in groups about topics/news stories	G: Final project topic/ news story due by 9 am	
	I: Evaluation form due by 9 am	
Th M 2	Meet in groups to assess sources	G: Bibliography due by 9 am
		I: Evaluation form due by 9 am
	Spring Break	
W M 15		G: Solution proposal due by 5 pm
Th M 16	Meet in groups to discuss solution proposal	I: Evaluation form due by 9 am
Tu M 28		G: 1st paper draft due by 5 pm
Th M 30	Meet ill groups to discuss paper drafts	I: Evaluation form due by 9 am
Th A 6		G: 2nd paper draft due by 5 pm
TRI A 11	Mcct in groups to discuss paper drafts	I: Evaluation form due by 9 am
Th A 13	Practice presentations	
Tu A 18	Practice presentations	
Th A 20	Meet in groups to discuss presentations	I: Evaluation form due by 9 am
Th A 27	Oral Defenses (8:30—11:30 am)	I: Summary Evaluation form due G:
		Final Project due