

## HNRS 300, Fall 2017: Contemporary Issues: What are the Chances?

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Instructor	Dr. David Taylor Trexler Hall 270B Email: taylor@roanoke.edu @RCMathProf	Phone: (540) 375-4933 Fax: (540) 375-2561 Web: see Inquire www.facebook.com/uvadt79
Class Meetings	Mondays, Wednesdays, and Fridays: 12:00 Noon - 1:00 PM in Miller 013	
Office Hours	Mondays, Wednesdays, and Fridays: 10:30 AM - 11:30 AM, Tuesdays: 1:30 PM - 2:30 PM, and by appointment (email or call me)	
Course Description	We live in a world where numerical information floods our news reports, our newspapers, and the Internet. Access to this information is becoming easier and quicker for most of us; with a quick visit to the Google or CNN website, virtually any search or article presents information quantitatively in many forms, ranging from graphs, to data tables, summaries, and statistical results. Is this ease of access to numerical information and statistics tainting our truth? Does the misuse of quantitative reasoning provide any answer desired to almost any question? Throughout this semester, we will explore these questions in class and learn how to properly argue using numerical information. The final project and defense will allow you, in groups, to explore a contemporary issue affecting a local organization, and decide how one should properly argue that issue, and propose a	
Motivation	solution that organization could consider using.	
	Quoting a journal article from 1995, one can read "every year since 1950, the number of American children gunned down has doubled." This is quite possibly one of the worst (most inaccurate) statistics ever quoted! Why is that? Consider if in 1950, only 1 child was gunned down. In 1951 it would be 2, then 4 children in 1952, and the process continues. In 1960, the amount would be $2^{10} = 1,024$ children. In 1970 it would be $2^{20} = 1,048,576$ . In 1983, if the quote is correct, one would determine that $2^{33} = 8,589,934,592$ children were gunned down! This is a number larger than the entire population of the world, adults, children, and all! Learning to properly argue and learning to search for the validity of quantitative information is an issue that is becoming more and more important as we have access to more and more information.	
Intended Learning Outcomes	Through common HNRS 300 intended learning outcomes, by the end of this course, successful students will be able to: <ul style="list-style-type: none"><li>• apply their research findings to a formal project addressing the course topic question and will successfully present this proposal in an oral defense,</li><li>• 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,</li><li>• contribute to meaningful, effective discussion and collaborative work that includes expressing, listening to, and debating ideas,</li><li>• apply critical thinking and quantitative reasoning skills in a meaningful way,</li><li>• make explicit, meaningful connections between past course work (both in the core and in their majors) and contemporary issues,</li><li>• 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, and</li><li>• connect course content to their lives and to communities beyond the classroom.</li></ul>	

In addition, this section of HNRS 300 has the following additional intended learning outcomes, so that by the end of this course, successful students will be able to:

- analyze statistics and quantitative information for validity and unbiasedness and formulate an argument for or against an issue using statistics and quantitative information properly, and
- synthesize their training in the methodologies of the natural sciences, social sciences, and humanities with quantitative information to create their argument.

**Required Materials** Book 1: *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*, by Joel Best, University of California Press, *Updated Edition*  
 Book 2: *More Damned Lies and Statistics: How Numbers Confuse Public Issues*, by Joel Best, University of California Press  
 Book 3: *Strengths Finder 2.0*, by Tom Rath, Gallup Press, *not a used copy*  
 Reference Book: *A Writer's Reference* by Diana Hacker, RC Edition  
 Other: see Other Readings for other class materials (provided)

**Course Grades** The following table lists the weights for the various forms of assessment for this class.

Individual Paper #1	10%
Group Case Study Presentation	20%
Individual Paper #2	15%
Final Project	55%
Annotated Bibliography 10% Drafts and Reflection 5%	
Oral Defense 15% Written Paper 15%	
Group Member Evaluations 10%	

A grade scale will be determined after final grades are computed, but will be no worse than the scale given below.

		B+	88-89	C+	78-79	D+	68-69		
A	93-100	B	83-87	C	73-77	D	63-67	F	0-59
A-	90-92	B-	80-82	C-	70-72	D-	60-62		

**Weeks 1-7** During the first half of the class, we will first explore the first few chapters of *Damned Lies and Statistics* and *More Damned Lies and Statistics* in order to motivate our overarching contemporary issue. We will discuss the final project and work to select groups that you will use for the rest of the semester. Before ultimately choosing, however, you will prepare a short (approximately 3 minutes) presentation to the class about yourself regarding your strengths, weaknesses, roles you enjoy in group work, and thoughts on the types of questions and projects that might interest you. To guide your presentation and to give you a chance to explore yourselves, we will use *Strengths Finder 2.0* to learn about “people traits” and what they mean. A short paper about yourself and your traits will be assigned during this time. Based on all of this, students will choose groups and select topics. Your groups will be sized at approximately 3 to 4 classmates, and should be of mixed majors and strengths.

Once groups are chosen, we will next focus on looking at the background necessary to critically evaluate sources that use statistics and quantitative information. The bulk of this part of the course will be in-class discussions (first in small group discussions and then as a class) that result from reading *Damned Lies and Statistics*, *More Damned Lies and Statistics*, and other external readings. This book focuses on several issues that are important to us; why are statistics needed? Where do bad statistics come from, and how can that be avoided? How are numbers mangled, and what happens when inappropriate comparisons are made?

While we read through this book, we will also be looking at several case studies of quantitative information in the media. Are regulations on fuel efficiency working? Are arguments posed in letters to the editor valid and reasonable?

You will reflect on these case studies by completing a written assignment and response, and discussing your thoughts and conclusions in small groups.

For one of these case studies, you will construct a written paper with your argument, using the case study as the reference base while also doing some research to find other articles that address the same topic. This paper will be approximately 4 pages in length and will serve as practice for the final paper and defense.

For another of the case studies, you and your small group will prepare a presentation (approximately 15 minutes) to the class regarding your thoughts and conclusion about the case study. Again, this presentation is meant to be practice for working in groups and rehearsing your oral presentation skills.

Finally, we will spend time talking about the final report itself and the final defense (strategies, format, and such). You should find time in weeks 4 and 5 to meet with the reference librarian, Piper Cumbo, to obtain help with finding sources and quantitative information regarding their chosen topic. As a class, we will develop a grading rubric for the final defenses.

**Community Partners** One important aspect of this class is that your group will be selecting an issue that affects a specific organization in the Roanoke Valley (your community partner). During weeks 3 through 5 of the course, your group will need to schedule a meeting with the community partner (and the instructor) to talk about the issue selected and expectations that both sides have in this partnership (this time will be outside of the regularly scheduled time for class and will likely be over dinner; Roanoke College will pay the cost of up to two dinners for each group with their external partner). While meeting with or talking to the community partners, at all times group members must be professional, both in appearance and manner; you are representing Roanoke College in this endeavor, and we aim to present ourselves as professionals ready to move out into the world of careers.

This semester, our community partners will be Blue Ridge Literacy and LEAP; a representative from each organization will be coming to class on Wednesday, September 6 to talk about issues affecting their organization and the Roanoke Valley. Note that a representative of each community partner will be invited, and encouraged, to attend your group's final defense!

## Weeks 8-13

Generally speaking, we will not meet much as a class during these weeks; most meetings will be individual group meetings with me in my office. Please pay attention to the course schedule at the end of this syllabus as there are meeting days for our class. Most notably, we will meet the first day after break just to more or less touch base with each other and talk about the upcoming deadlines.

During this time, groups should be meeting often and working heavily on their final paper and defense! To keep groups on task, during week 7 an annotated bibliography and proposal is due to me, along with the first evaluation of group members will be due. For week 10, in your group conference with me your first “draft” is due that consists of an outline, major ideas and arguments, and quantitative information regarding your project is due. During week 11, we will meet as a class once for each group to give an oral report on the group’s progress on the topic. In addition, at this time the second evaluation of group members is due.

As the semester comes to an end, for week 12 your second “draft” of the final paper is due to me; this should essentially be your final version with as much polish as possible, so that we can discuss issues during the final group conference with me during week 13. In addition, during week 13 a draft of the presentation portion of your final project is due to me so that I can provide feedback.

## Finals Week

There is no final exam in this class; instead, we will meet for final defenses at the regularly scheduled final exam time for this class. Your group will have 30 minutes to present their argument, with up to 10 minutes allotted for questions. The final version of your final paper is due at this time, as is the final evaluation of group members. Note that the final paper length is roughly 30 pages and should include the appropriate background material, supporting evidence, both of why your argument is properly presented and supported and also why existing arguments are inappropriate presented, and your final argument of how your topic and argument should be presented.

## Attendance & Make-Up Work

Attendance is both required and expected in this course. **You will not be allowed to make up any work missed due to an absence.** If you must miss class for any reason, you should talk to me well in advance, and you should arrange to have any work due submitted before your absence. Note that for a large part of this course, you will be meeting as groups outside of class. You are expected to attend all of these meetings, and failure to attend these meetings or share in the group effort for the final defense and paper will negatively affect your grade.

Note that for the last half of the semester, for many of our regular class meetings, we will not be meeting together as a class. This, however, does **not** mean you can schedule work hours, trips, or other things during this time! In fact, this should remain open as a guaranteed time your group can meet.

## Academic Integrity

Students are expected to adhere to the Academic Integrity policies of Roanoke College. All work submitted for a grade is to be your own work! No electronic devices should be taken out during any class (this includes cellular phones; please turn them **off** before class) unless otherwise mentioned.

Course Schedule The following schedule is approximate and subject to change. Any necessary changes will be discussed in class. Note that “DLS” refers to *Damned Lies and Statistics* and “MDLS” refers to *More Damned Lies and Statistics*.

<b>Weeks 1-7: Background, Group and Topic Selection</b>		
Wed	Aug 30	Introduction to HNRS 300 and Our Overarching Contemporary Issue
Fri	Sept 1	Discussion and Review of the HNRS Curriculum Introduction to <i>Strengths Finder</i>
Mon	Sept 4	Group and Class Discussion of <i>Strengths Finder</i>
Wed	Sept 6	Visit from Blue Ridge Literacy and LEAP Representatives
Fri	Sept 8	<b>Individual Presentation on Strengths and Interests</b> <b>Individual Strengths Finder Paper Due</b>
Mon	Sept 11	Issue and Group Selection About the Final Project, Defense, and Paper
Wed	Sept 13	Introduction, Chapter 1, and Chapter 2 (DLS)
Fri	Sept 15	Chapter 3 and Chapter 4 (DLS) Case Study #1 Assigned
<b>Weeks 4-5: Remember to Meet with Community Partner and Librarian Piper Cumbo</b>		
Mon	Sept 18	Discuss Case Study #1 in Groups Chapter 5 (DLS) and Chapter 1 (MDLS)
Wed	Sept 20	Chapter 2, Chapter 3, and Chapter 4 (MDLS)
Fri	Sept 22	Chapter 5 and Chapter 6 (MDLS) Case Study #2 Assigned <b>Written Individual Paper on Case Study #1 Due</b>
Mon	Sept 25	Chapter 6 (DLS) and Chapter 7 (MDLS) Discuss Case Study #2 in Groups
Wed	Sept 27	About Oral Presentations; Group Work Time for First Presentation
Fri	Sept 29	Group Work Time for First Presentation
Mon	Oct 2	<b>Group Presentations on Case Study #2</b>
Wed	Oct 4	<b>Group Presentations on Case Study #2, Continued</b>
Fri	Oct 6	More about Oral Presentations, Group Updates Final Defense Rubric Creation
Mon	Oct 9	Group Conferences with Instructor
Wed	Oct 11	Group Conferences with Instructor
Fri	Oct 13	<b>Group Project Proposal and Annotated Bibliography Due</b> <b>Group Member Evaluation #1 Due</b>
<b>Fall Break</b>		
Mon	Oct 23	<b>Lab Day: Meet in Trexler 363</b> , Refresher Meeting Quantitative Reasoning Assessment Test
Wed	Nov 1	Group Conferences with Instructor <b>Annotated Bibliography, Group Member Evaluation #2 Due</b>
Mon	Nov 13	Group Conferences with Instructor <b>First Draft Due</b>
Fri	Nov 17	<b>Class Meeting:</b> Group Update Reports <b>Group Member Evaluation #3 Due</b>
Tue	Nov 21	<b>Second Draft Due</b>
Wed	Nov 29	Final Group Conferences with Instructor
Wed	Dec 6	<b>Draft of Defense Presentation Due</b>

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<b>Fri</b>	<b>Dec 15</b>	<b>Final Defenses: 2:00 PM - 5:00 PM</b> <b>Group Member Evaluation #4 Due</b> <b>Final Written Project Due</b> <b>Final Service Reflection Due</b>
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Expected You are expected to spend at least 12 hours, on average, per week for this class, including Workload hours inside and outside of class.