

## HNRS 300, Fall 2019: Contemporary Issues: What are the Chances?

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Instructor	Dr. David Taylor Trexler Hall 270B Email: taylor@roanoke.edu	Phone: (540) 375-4933 Fax: (540) 375-2561 Web: see Inquire
Class Meetings	Mondays, Wednesdays, and Fridays: 10:50 AM - 11:50 AM in Life Science 305	
Office Hours	<p>In an effort to be more available to students while also acknowledging that meetings occur in my schedule that are outside of my direct control, rather than specify office hours specifically, I have chosen to use the "You Can Book Me" online scheduling tool so that you can schedule an appointment whenever, and your appointment will be put on my schedule (this online tool uses my live availability). Note that I am <i>generally</i> on campus all weekdays from 9 AM to 2 PM and you are still welcome to stop by without an appointment, but I may or may not be able to meet at any given time. You can access the online scheduler at:</p> <ul style="list-style-type: none"><li>• <a href="http://drtaylorofficehours.youcanbook.me">drtaylorofficehours.youcanbook.me</a></li></ul>	
Course Description	<p>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</p> <p>solution that organization could consider using.</p>	
Motivation	<p>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 <math>2^{10} = 1,024</math> children. In 1970 it would be <math>2^{20} = 1,048,576</math>. In 1983, if the quote is correct, one would determine that <math>2^{33} = 8,589,934,592</math> 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.</p>	
Intended Learning Outcomes	<p>Through common HNRS 300 intended learning outcomes, by the end of this course, successful students will be able to:</p> <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></ul>	

- make explicit, meaningful connections between past course work (both in the core 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, and
- connect course content to their lives and to communities beyond the classroom.

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: *Strengths Finder 2.0*, by Tom Rath, Gallup Press, *not a used copy*  
 Reference Book: *A Writer's Reference* by Diana Hacker, RC Edition or *Easy Writer* by Andrea A. Lunsford, 6th 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	15%
Individual Paper #2	15%
Final Project	70%
Annotated Bibliography	5%
Drafts and Reflection	15%
Oral Defense	20%
Written Paper	20%
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 1-4** During the first third of the class, we will first explore *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 partners. 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* 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? From other readings, you will complete an individual paper.

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, Dave Wiseman, 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 and discuss the Institutional Review Board (IRB).

**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 for the dinner 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 LEAP and the Roanoke Refugee Partnership; a representative from each organization will be coming to class on Friday, August 30 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 5-13**

Generally speaking, we will not meet much as a class during these weeks; there will be some work days where I ask you to come to class, "no class" days that are set aside for you to work together wherever you may like, and days where individual groups will meet with me in my office. Please pay attention to the course schedule at the end of this syllabus! 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, along with some practice presentation days at the end of the semester (only two groups will need to come to class on a given day).

During this time, groups should be meeting often and working heavily on their final paper and defense! To keep groups on task, during week 6 an annotated bibliography is due to me, along with the first evaluation of group members. Immediately after fall break, your group's official proposal is due. Afterwards, we will alternate between having group meetings in my office and having drafts due for me to review (three total). Note that more group member evaluations are due in this time frame; pay attention to the syllabus.

As the semester comes to an end, for week 13 we will have two practice presentation days; for each day, only two groups will need to be present, and each group is responsible for providing feedback to the other group.

**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 25 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*.

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**Weeks 1-4: Background, Group and Topic Selection**

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Wed	Aug 28	Introduction to HNRS 300 and Our Overarching Contemporary Issue Introduction to <i>Strengths Finder</i>
Fri	Aug 30	Visit from Roanoke Refugee Partnership and LEAP Representatives
Mon	Sept 2	Discussion and Review of the HNRS Curriculum Review of Strengths Finder Assignment
Wed	Sept 4	<b>Individual Presentation on Strengths and Interests</b> <b>Individual Strengths Finder Paper Due</b>
Fri	Sept 6	Group Selection About the Final Project, Defense, and Paper
Mon	Sept 9	Introduction, Chapter 1, and Chapter 2 (DLS)
Wed	Sept 11	Chapter 3 and Chapter 4 (DLS)
Fri	Sept 13	Chapter 5 and Chapter 6 (DLS)

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**Weeks 3-5: Remember to Meet with Community Partner and Librarian Dave Wiseman**

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Mon	Sept 16	Article #1 & #2 Discussion
Wed	Sept 18	Additional Article Discussion, Paper #2 Assigned
Fri	Sept 20	<b>No Class</b>
Mon	Sept 23	About Oral Presentations, Rubric Creation, IRB
Wed	Sept 25	Work Day in Class <b>Individual Paper #2 Due</b>
Fri	Sept 27	Work Day in Class

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**Only Days with Class Time, Individual Group Meetings, or Things Due Follow**

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Wed	Oct 2	<b>Annotated Bibliography Due</b>
Fri	Oct 4	Group Conferences with Instructor
Mon	Oct 7	Group Conferences with Instructor
Fri	Oct 11	<b>First Group Member Evaluation Due</b>
Mon	Oct 21	<b>Lab Day: Meet in Trexler 166</b> , Refresher Meeting Quantitative Reasoning Assessment Test <b>Formal Group Proposal Due</b>
Wed	Oct 23	Group Conferences with Instructor
Fri	Oct 25	Group Conferences with Instructor
Wed	Oct 30	<b>Project/Paper Outline Due</b>
Fri	Nov 1	Group Conferences with Instructor
Mon	Nov 4	Group Conferences with Instructor
Fri	Nov 8	<b>Draft #1 Due</b> <b>Second Group Member Evaluation Due</b>
Mon	Nov 11	Group Conferences with Instructor
Wed	Nov 13	Group Conferences with Instructor
Mon	Nov 18	<b>Draft #2 Due</b>
Wed	Nov 20	Group Conferences with Instructor
Fri	Nov 22	Group Conferences with Instructor
Tue	Nov 26	<b>Draft #3 Due</b> <b>Third Group Member Evaluation Due</b>
Mon	Dec 2	Work Day in Class
Wed	Dec 4	Practice Presentations Day #1
Fri	Dec 6	Practice Presentations Day #2

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<b>Tue</b>	<b>Dec 10</b>	<b>Final Defenses: 8:30 AM - 11:30 AM</b>
		<b>Fourth Group Member Evaluation 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.