# HNRS 300: What are the Chances?

# **Spring 2023**

# Contact MeMeet with MeClass InfoName: Dr. MaggieOffice: Trexler 270B StudentLocation: Lucas 217Pronouns: She/Her/HersHours:Days: Tues/ThursEmail:MWF 10:30 – 11:30AMTime:rahmoeller@roanoke.eduOr email me to meet at a different time!10:10 – 11:40PM

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 solution that organization could consider using.

**Motivation:** 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 that 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:

- apply their research findings to a formal project addressing the course topic question and will 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
- apply critical thinking and quantitative reasoning skills in a meaningful way
- 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
- 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:

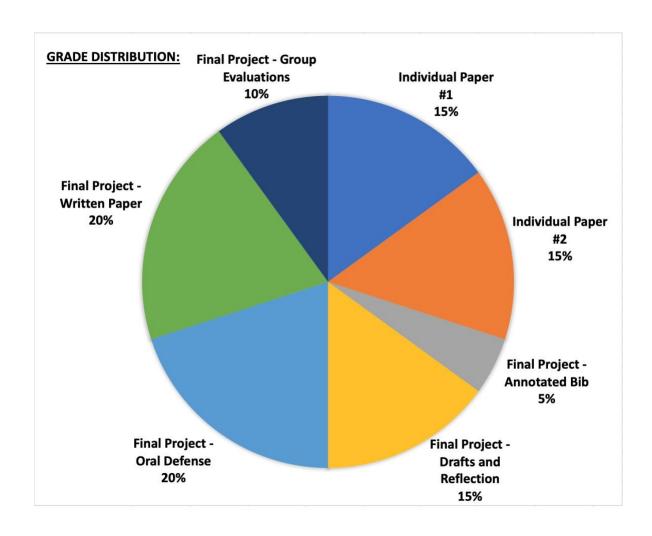
- analyze statistics and quantitative information for validity and unbiasedness and formulate an argument for or against an issue using statistics and quantitative information properly
- synthesize their training in the methodologies of the natural sciences, social sciences, and humanities with quantitative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

Your success in this class is important to me! We all learn differently and bring a variety of strengths and needs to the class. If there are aspects of the course that prevent you from learning or that make you feel excluded, please let me know as soon as possible. Together we'll develop strategies to meet both your needs and the requirements of the course.

## **Required Materials:**

- Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists,
  by Joel Best, University of California Press, Updated Edition
- Easy Writer (6th edition) by Andrea Lunsford
- Strengths Finder 2.0, by Tom Rath, Gallup Press (provided by Roanoke College)
- Additional readings will be taken from other sources and be provided by me.

**Commitment Hours:** This course expects you to spend at least 12 hours of work a week inside and outside of class.



A:	93-100	B:	83-87	C:	73-77	D:	63-67
A-:	90-93	B-:	80-83	C-:	70-73	D-:	60-63
B+:	87-90	C+:	77-80	D+:	67-70	F:	Below 60

### **COURSE EXPECTATIONS**

### **Class Structure:**

Weeks 1-5: The first 5 weeks of the semester will feel like a "normal" class – we will meet as a class each day, preparing ourselves for the final project, which will take a majority of the semester.

First, 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, and roles you enjoy in group work. 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 and a sharing of potential issues and topics you would be interested in researching, you will choose groups and select partners. Your groups will be sized at approximately 4 to 5 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.

In addition, 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 your chosen topic. As a class, we will develop a grading rubric for the final defenses and discuss the Institutional Review Board (IRB).

Community Partner: One important aspect of this class is that your group will be selecting an issue that affects a specific organization in the Roanoke Valley – the Clean Valley Council (CVC). During weeks 3 through 5 of the course, your group will need to schedule a meeting with the CVC (and me) 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 the CVC). 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.

A representative from the CVC will be coming to class on Thursday, Jan 19 to talk about issues affecting their organization and the Roanoke Valley. Note that a representative of the CVC will be invited, and encouraged, to attend each group's final defense!

Weeks 6-13: Generally speaking, we will not meet much as a class during these weeks; most days are set aside for group work and/or group conferences with me (your instructor). Please pay attention to the course schedule at the end of this syllabus! Most notably, we will meet the first day after Spring 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 before Spring Break, your group's official proposal is due. Immediately after break, we will meet as a class to regroup. Shortly after, a paper outline is due to me. 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 25 minutes to present your 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. Also, a final reflection of the project will be due at this time.

# **Diversity and Inclusivity**

### **Attendance Policy:**

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.

**Attendance Policy:** Our course's success depends on you attending class! If you miss class, you will miss community building, engaging conversations, and information that I deem worthy of your time! Plus, we will miss you!

However, life happens! You may get sick, have a game scheduled, or have something else happen. It will not be the end of the world if you miss a class *very occasionally*. At some point, though, missing class can be detrimental to success. Especially since, we meet twice a week for the first 5 weeks of the semester (10 class meetings), we meet 3 times after break as a whole class, and we meet for group conferences 5 times. So, do your best to be in class! Strive for perfect attendance!

What should you do if you have to miss class? Let me know ASAP! Communication is key! I don't need details (please, spare me the details!) but do let me know ahead of time, so we can make plans, if needed. If you cannot let me know ahead of time (emergencies do happen!), just let me know as soon as you can. Email is typically the best form of communication for me.

If you are sick (and contagious), please either stay home OR come to class wearing a mask (unless you have COVID symptoms – then follow both Roanoke College & CDC guidelines).

Late Work: Whether or not to accept late work is always a tough decision. Life happens – and occasionally we need more time to complete tasks! But, sometimes turning in an assignment late causes more complications than benefits. Due to the fact that we will be working with a local organization (the Clean Valley Council), we need to maintain an extra strong sense of professionalism, which includes submitting work on time. As with attendance, *communication* is key! Let me know when something comes up – I will do my best to work with you. Be sure to communicate with your group – y'all are in this project together and need each other to succeed. Communicate!!

Academic Integrity: Students are expected to adhere to the Academic Integrity policies of Roanoke College (<a href="https://www.roanoke.edu/inside/a-z">https://www.roanoke.edu/inside/a-z</a> index/academic integrity). All work submitted for a grade is to be your own work! Doing your own work and properly acknowledging the work of others is of utmost importance in the academic setting.

# **RESOURCES**

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 <a href="https://www.roanoke.edu/writingcenter">www.roanoke.edu/writingcenter</a>. Questions? Email <a href="https://writingcenter@roanoke.edu">writingcenter@roanoke.edu</a> or call 540-375-4949.

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 e-mail at <a href="mailto:aes@roanoke.edu">aes@roanoke.edu</a> 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.

**Student Health & Counseling Services** supports students through in-person health appointments, inperson counseling, 24/7 telehealth (TimelyCare), Therapy Assistance Online, as well as resources related to general wellness, LGBTQ+, sexual assault, substance abuse, and suicide prevention. Unmet health needs can negatively impact your performance in this course. Student Health & Counseling Services can help. Please see <a href="https://www.roanoke.edu/shcs">https://www.roanoke.edu/shcs</a> for more information and to access services.

# **Tentative Course Schedule**

Note: DLS refers to Damned Lies and Statistics

		Weeks 1-5: Background, Group and Topic Selection
Tues	Jan 17	Intro to HNRS 300 and Strengths Finder - Assignment HNRS
		curriculum review
Thurs	Jan 19	Individual Presentation on Strengths and Interest Individual
		Strengths Finder Paper Due
Tues	Jan 24	Visit from the Clean Valley Council
Thurs	Jan 26	Group Selection
		Intro to Final Project, Defense, and Paper
	Wee	eks 3 – 5: Remember to Meet with CVC and Dave Wiseman
Tues	Jan 31	Introduction, Chapters 1 - 3 (DLS) – discussion
Thurs	Feb 2	Chapters 4 & 5 (DLS) – discussion
Tues	Feb 7	Chapter 6 (DLS), Articles #1 and #2 – discussion
Thurs	Feb 9	Additional Article Discussion
		Paper #2 Assigned
Tues	Feb 14	About Oral Presentation, Rubric Creation, IRB
Thurs	Feb 16	In-Class Work Day
		Individual Paper #2 Due
		Weeks 6 – 13: Final Projects
Tues	Feb 21	Annotated Bibliography Due
Thurs	Feb 23	Group Conferences with Me
		First Group Member Evaluation Due
Tues	Feb 28	Formal Group Proposal Due
Thurs	Mar 2	Group Conferences with Me
		Spring Break!
Tues	Mar 14	Refresher Meeting as a Class! (class meeting!!)
Thurs	Mar 16	Project/Paper Outline Due
Tues	Mar 21	Group Conferences with Me
Tues	Mar 28	Draft #1 Due
		Second Group Member Evaluation Due
Thurs	Mar 30	Group Conferences with Me
Thurs	Apr 6	Draft #2 Due
Tues	Apr 11	Group Conferences with Me
*Fri	Apr 14	Draft #3 Due
		Third Group Member Evaluation Due
Tues	Apr 18	Practice Presentations Day #1 (1/2 class meeting!!)
Thurs	Apr 20	Practice Presentations Day #2 (1/2 class meeting!!)

Mon	May 1	Final Defenses 8:30AM – 11:30AM
		Fourth Group Member Evaluation Due
		<b>Final Written Project Due</b>
		Final Service Reflection Due