

INQ 300-C, Fall 2018 - The Human Footprint: a study of human population growth

Instructor	Maggie Rahmoeller Email: rahmoeller@roanoke.edu	Phone: (540) 375-2505 Office: Trexler 270J
Class Meetings	T/Th 1:10-2:40PM Trexler 362	
Office Hours	By appointment only through https://drmaggie.youcanbook.me/ : Mon 9:00AM-10:00AM, 3:30PM-4:30PM Thurs 3:00PM-4:00PM Tues 3:00PM-4:00PM Fri 3:30PM-4:00PM Wed 9:00AM-10:00AM	

NOTE: You can book up to 4 days in advance but have to book at least 2 hours before the time slot. Email me if none of these times work.

Course Information Currently, the world population is approximately 7.6 billion people, and it's changing every second. Some researchers estimate that the world population will reach 8 billion people by the year 2025. How are these estimates calculated? Are they accurate and do they consider environmental factors that affect viability? Even more importantly, does the human population have a carrying capacity, influenced by availability of resources and physical space? The population growth affects our world economically, culturally, and socially in addition to changing the ecosystem. For instance, National Geographic claims we'll need to double agricultural crops by the year 2050 to feed the world population. In this class we will focus on and discuss the ethical dilemmas that arise in controlling the population size, the different factors that influence growth rate changes, and what our role should be in maintaining world resources.

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 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.

Required Materials **Textbook:** *Countdown: Our Last, Best Hope for a Future on Earth?*, by Alan Weisman
Other Resource: *A Writer's Reference*, 7th edition, Hacker

Course Structure The semester will be divided into two parts. During the first part, we will meet as a class and work through smaller papers and projects together. For the second part, you will be split into your final groups and work outside of class on your project and presentation. We will schedule individual group meetings to give me a chance to discuss the progress of your project with you. Occasionally, we will meet as a class.

Course Grades The following table is a breakdown of the grades for the semester:

Group Article Presentations	5%	Final Paper	35%
Individual Paper	10%	Annotated Bibliography (5%)	
Group Debate	5%	Solution Proposal (5%)	
Group Assessment	10%	Two Drafts (15%)	
Self-Reflection Paper	5%	Final Paper (10%)	
Self-Reflection Log	10%	Final Presentation	20%

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

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

Attendance & Make-Up Work

Attendance is critical to the understanding of the material in the course; it is both required and expected. Any absence that is not discussed with the instructor prior to the missed class is considered unexcused. When absent, excused or unexcused, you are responsible for all material covered in class. Work missed due to either an unexcused or excused absence can only be made up when arrangements are made in advance of the absence. You need to come to class prepared and willing to contribute to class discussions and progress. You can participate by: working in small groups during class time, presenting your group’s ideas to the class, partaking in class discussions, and finding relevant sources and information for the project.

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

Group Article Presentations

After we have selected articles supporting different factors that influence human population growth, your group will select an article and present the reasoning behind your stance of how it affects growth. Presentations will be 10-15 minutes.

Individual Paper

You will learn about some of the mathematical and historical background to the model I provided, and write a 5-page paper about a view on the given model on 2 different factors that affect population growth. You will need a minimum of 5 sources for this paper. One of these sources must be GapMinder - a tool that can be used to visualize data. You will need to choose appropriate variables that relate to your paper, create a visual with Gapminder, and describe the trends you see over time from that visual.

Group Debate

Your group will decide whether or not to support a controversial method of controlling population size (e.g. requiring each family to have at most 2 children). Then we will have an in-class debate on your stances.

Group Assessment

Your group will write a persuasive essay (4-5 pages) reflecting on your stance in the debate and incorporating the rebuttal you received from the opposing group.

Self-Reflection Paper

This is a short paper (about 2 pages) where you will reflect on the roles you played 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-Reflection 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

Each group will be assigned one of the brainstormed topics that are affected by the size of the human population. As a group, you will address the issue, propose a solution to that issue, and defend your proposal. This paper (approximately 20 pages) will use your research and writing skills learned in the INQ curriculum, which includes the skills you used in the projects done in the first part of this course. These papers will be archived by the General Education Office. You will need a minimum of 15 sources for this paper.

Final Presentation

As a group, you will present your topic and proposed solution in an oral defense. Presentations will last about 20 minutes, with extra time for questions and discussion.

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! Note that any electronic devices used during exams must be first okayed by your instructor (me), and used only in an appropriate manner, which is decided by your instructor (me).

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 Laura Leonard, Assistant Director of Academic Services for Accessible Education, at 540-375-2247 or by e-mail at aes@roanoke.edu 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 Laura Leonard at your earliest convenience to schedule an appointment.

Writing Center Roanoke College's Writing Center is located on the Lower Level of Fintel Library and offers writing tutorials focused on written and oral communication for students working on writing assignments/projects in any field. Writers at all levels of competence may visit the Writing Center at any point in their process, from brainstorming to drafting to editing, 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 by going to www.roanoke.edu/writingcenter, where our schedule of writing workshops and creative writing playshops is also posted. Questions? Email writingcenter@roanoke.edu or call 375-4949. Like our Facebook page for updates!

Course Schedule The following schedule is approximate and subject to change.

Thur	Aug 30	Intro to Course and to Population Models	<i>Find articles Read Weisman: Ch 1-3</i>
Tues	Sept 4	Group work discussion /Form 1st groups	<i>Group Article Presentations assigned Read Weisman: Ch 4 & 5</i>
Thur	Sept 6	Work Day - Presentations	
Tues	Sept 11	Group Article Presentations / Discussion	<i>Individual Paper Assigned Read Weisman: Ch 6 & 7</i>
Thur	Sept 13	Finding Resources / Work Day - Individual Papers	<i>Read Weisman: Ch 8-10</i>
Tues	Sept 18	Discussion / Form debate groups	<i>Individual Papers due Read Weisman: Ch 11 & 12</i>
Thur	Sept 20	Work Day - Debate	
Tues	Sept 25	Debate Day / Discussion	<i>Self-Reflection Paper assigned Group Assessment assigned Read Weisman: Ch 13 & 14</i>
Thur	Sept 27	Discuss Group Assessment /Brainstorm topics	<i>Read supplemental material</i>
Tues	Oct 2	Share self-assessment / Decide final groups	
Thur	Oct 4	Work Day - decide final topics and plan	<i>Read Weisman: Ch 15-17 Start Self-Evaluation logs Set up meetings with Piper (Thu/Fri/Mon/Tue)</i>
Tues	Oct 9	Group conferences - finalize topics	
Thur	Oct 11	Work Day	<i>Annotated Bibliography due 5PM</i>
Fall Break			
Tues	Oct 23	Group conferences - source assessment	
Thur	Oct 25	QR assessment - computer lab / Work Day	
Tues	Oct 30	Work day	<i>Solution Proposal due 5PM</i>
Thur	Nov 1	Group conferences - solution proposals	
Tues	Nov 6	Work Day	
Thur	Nov 8	Work Day	
Tues	Nov 13	Work Day	<i>First Draft due 5PM</i>
Thur	Nov 15	Group conferences - First drafts	<i>Start Presentations</i>
Tues	Nov 20	Work Day	
Thanksgiving Break			
Tues	Nov 27	Work Day	<i>Second Draft due 5PM Finalize & Practice Presentations</i>
Thur	Nov 29	Group conferences - Second draft	
Tues	Dec 4	Presentations - Day 1	
Thur	Dec 6	Presentations - Day 2	
Mon	Dec 10	Final Paper Due	by 5PM