

INSTRUCTOR	Maggie Rahmoeller Office: Trexler Hall 270J Email: rahmoeller@roanoke.edu
OFFICE HOURS	M/W 10-11:30AM, Thurs 1-3PM
CLASS MEETINGS	Mondays, Wednesdays, Fridays: 12-1PM in Olin 230
COURSE INFORMATION	Currently, the world population is approximately 7.4 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 *The Coming Population Crash and Our Planet's Surprising Future*, by Fred Pearce
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 an example project 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:

Class Participation	10%
Group Article Presentations	5%
Individual Paper	10%
Group Debate	5%
Group Assessment	10%
Self-Evaluation 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 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

CLASS PARTICIPATION

During the first part of the semester, we will be working in class on our example project. 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.

GROUP ARTICLE PRESENTATIONS

After we have selected articles supporting the different views on the given model, your group will select an article and present the reasoning behind your stance. 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 different from your group’s stance.

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 group with the opposite view.
- 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.
- FINAL PRESENTATION** As a group, you will present your topic 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. Presentations will last about 20 minutes, with extra time for questions and discussion.
- ATTENDANCE POLICY** Class attendance is expected. If you have to miss a class, you are responsible for learning all material covered that day and making arrangements in advance with your group. 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 in Fintel Library, Sunday-Thursday 4-9PM.
- DISABILITY SUPPORT SERVICES** The Office of Disability Support Services, located in the Goode-Pasfield Center for Learning and Teaching in Fintel Library, provides reasonable accommodations to students with identified disabilities. Reasonable accommodations are provided based on the diagnosed disability and the recommendations of the professional evaluator. Please contact JoAnn Stephens-Forrest, MSW, Coordinator of Disability Support Services, at 540-375-2247 or e-mail her (stephens@roanoke.edu) to schedule an appointment. If you have registered with DSS in the past, and would like to receive academic accommodations for this semester, please contact Ms. Stephens-Forrest at your earliest convenience, to schedule an appointment. Also,

please note that arrangements for extended time on exams, testing, and quizzes in a distraction-reduced environment must be made at least 48 hours before every exam.

ACADEMIC INTEGRITY I expect all students to follow the Academic Policies of Roanoke College. All work submitted for a grade is to be your own work! If you ever have questions about how these policies apply to our class, please contact me! Use your copy of *A Writer's Reference*, by Hacker to help with correctly citing your sources. Any violations of these policies will automatically be turned over to the Academic Integrity Council.

COURSE SCHEDULE

The following schedule is tentative. Any necessary changes will be discussed in class.

Part I

Mon	Jan 16	Introduction to Course (Pearce – Part I: Malthusian Nightmares)
Wed	Jan 18	Introduction to Population Model; (Pearce – Part II: Rise of the Population Controllers) <i>Find articles</i>
Fri	Jan 20	Group Work Discussion, Form 1 st groups; (Pearce – Part III: Implosion)
Mon	Jan 23	Work on Presentations
Wed	Jan 25	Group Article Presentations , (Pearce – Part IV: The Reproductive Revolution)
Fri	Jan 27	Presentations/Groups discussion; (Pearce – Part V: Migrants) <i>Individual paper assigned</i>
Mon	Jan 30	Work on Individual Paper; (Pearce – Part VI: Reaching the Limits)
Wed	Feb 1	Work on Individual Paper (supplemental Readings)
Fri	Feb 3	Form Debate Groups, Discussion Individual Paper Due <i>Find sources for debate</i>
Mon	Feb 6	Work on Debate
Wed	Feb 8	Debate Day! (Pearce – Part VII: Older, Wiser, Greener) <i>Self-reflection paper assigned</i>
Fri	Feb 10	Discussion on Debate, group assessment
Mon	Feb 13	Discussion on group assessment, Brainstorm topics for Final Project Group Assessment Due
Wed	Feb 15	Share self-reflection, Survey for deciding final groups Self-reflection paper due
Fri	Feb 17	Form final groups, start discussing projects <i>Start evaluation forms (log)</i>

Part II

Mon Feb 20 Group Conferences with Instructor – finalize topics

Meet with Piper – find sources

Fri Feb 24 **Annotated Bibliography Due**

Mon Feb 27 Group Conferences with Instructor – assess sources

Spring Break

Tue Mar 14 **Solution Proposal Due**

Wed Mar 15 Group Conferences with Instructor – solution proposal

Wed Mar 29 **1st paper draft due by 5PM**

Fri Mar 31 Group Conferences with Instructor – paper drafts

Fri Apr 7 **2nd paper draft due by 5PM**

Mon Apr 10 Group Conferences with Instructor – paper drafts

Mon Apr 17 **Practice Presentations**

Wed Apr 19 **Practice Presentations**

Mon Apr 24 Group Conferences with Instructor – presentations

Wed Apr 26 **Oral Defenses**