

# HONS 380-01: Genetics and the Good Society

"Disability is the most human of experiences, touching every family and—if we live long enough—touching us all."

Rosemarie Garland-Thompson



## Course Meetings

**Days:** Tuesday and Thursday

**Time:** 9:25 - 10:40am

**Location:** Berry 104

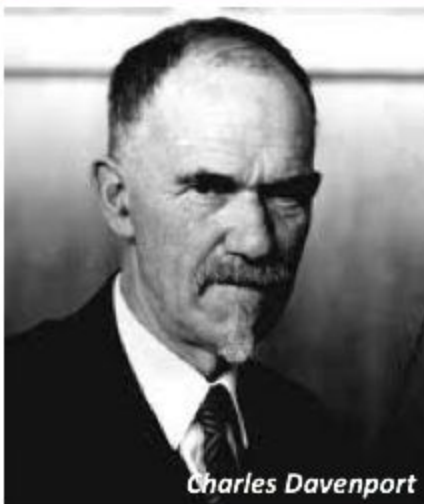
## Instructor

**Dr. Chris Korey**

**Department:** Biology

**Office:** RITA 207

**Email:** [koreyc@cofc.edu](mailto:koreyc@cofc.edu)



*Charles Davenport*



*Dr. Kim TallBear*

## Office Hours

**Location:** RITA 207

**Time:** Wednesdays 10-12;

**Note:** I realize you may have class during this time, so before/after class and by appointment are also alternative times to meet

"I think it's irresponsible not to try and direct evolution to produce a human being who will be an asset to the world."

James Watson

The continued development of gene sequencing technology has improved the ability of biomedical researchers to analyze whole human genomes for the genetic contributions to human health and disease. While the ability to store large amounts of genetic information in databases for large scale analysis presents an opportunity for significant discoveries, it should also make us pause to consider the implications of this technology in the context of how the information is used to promote human health, how we use it to make reproductive decisions, how the privacy of this information is maintained, and how this information shapes our views of who we are as individuals and as a society. This course will take an interdisciplinary look at all of these issues through the combined disciplinary lenses of Human Genetic Research and many other disciplines. We'll read primary literature in these disciplines to help us envision the place of genetic information and technology in a "good" society.

## Accessibility Statement

This class seeks ways to become a working and evolving model of inclusion and universal design for all participants. Individuals with disabilities of any kind (including learning disabilities, ADHD, depression, health conditions), who require instructional, curricular, or test accommodations are responsible for making such needs known to the instructors as early as possible. Every possible effort will be made to accommodate you in a timely and confidential manner. If you request accommodations, you need to be registered with the Center for Disability Services (Lightsey Center, Suite 104, 843.953.1431), which authorizes accommodations for students with disabilities.

I encourage you to approach me with any other life circumstances that may affect your participation in the course. These may be personal, health-related, family-related issues, or other concerns. The sooner I know about these, the earlier we can discuss possible adjustments or alternative arrangements as needed for homework, assignments, or class.

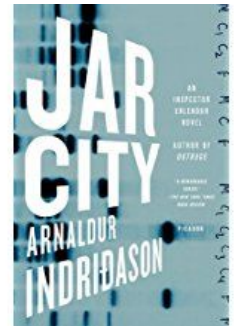
## Course Learning Outcomes

By the end of this course, you will:

- Demonstrate the ability to create and communicate, in written and oral formats, analytic arguments about issues in genetics supported by evidence
- Evaluate complex genetics and society issues using an interdisciplinary perspective
- Analyze and synthesize information within and/or across disciplines
- Begin to learn how to design and implement a major research project that reflects a high level of proficiency in methods of inquiry and ways of thinking

## Readings

- We will all be reading [Jar City by Arnaldur Indridason](#). The discussion of this text will be in the second week of class so pick-up the book soon. You can rent it from the book store for less than \$5.
- All the rest of readings will be available in OAKs. I will provide paper copies of all readings the week prior to our discussions to save you from printing them out. *It is important that you bring your annotated copies of the readings to class to refer to during our discussions.*
- Each student in the class will take part in a book group that will explore the topic of genetics and disability. You are only responsible for that book. Obtain the book as cheaply as possible. Any edition is fine.



## Course Engagement

This class will require active and sustained class participation. If you aren't ready to speak, listen, disagree, and argue when you come to class on any given day, then you aren't prepared for class. This classroom is a place that demands open, honest discussion; disagreement is expected, encouraged, and necessary for growth; however, abusive and insulting language has no place in this class. While you may not agree with everything said, you owe it to each other to listen carefully and respectfully to other people's views. Remember that you are never being graded on your views or your politics, only on the degree to which you have engaged with the readings and the discussions. **You will be required to lead discussion with another**

student twice during the semester. I'll assign you to days by the end of the week, but you can also choose days here.

## Assignments

**Pre-Discussion Reading Responses:** Prior to most course meetings, you will answer a series of questions to assist you in processing the reading and to help us shape the discussion in class. These will often have a fairly standard format, but others will have more specific prompts. These will be completed in a google doc using your College of Charleston Google accounts and links to your writing will be submitted in an OAKs drop box the night prior to each class meeting. Days for which these are due are labeled RR in the schedule below. *Periodically I will also ask you to bring in artifacts or other information on current topics that are relevant to the day's discussion - you will be notified of this well in advance.*

**Ancestry DNA Testing Critical Reflection:** The Honors College, the Biology Department, and the School of Science and Math have all provided funds to purchase individual 23andMe Ancestry DNA testing kits. These will be handed out to each of you to be processed and returned to the company. You will be writing a three part reflection on the process of collecting your DNA, returning the sample, and then receiving the results. Days for which these are due are labeled AR in the schedule below.

**Book Pre-Discussion and Reading Response:** Each student in the class will take part in a book group that will explore the topic of genetics and disability by reading a personal narrative. Each group will consist of six students. The groups will read one book chosen from the list below, a book that the rest of the class will not have read:

- Emily Rapp's [\*The Still Point of the Turning World\*](#) (Penguin, 2013)
- Ian Brown's [\*The Boy in the Moon\*](#) (St. Martin's Press, 2009)
- George Estreich's [\*The Shape of the Eye\*](#) (Penguin, 2011)

Book choices are on a first come first serve basis and a maximum of six students will be assigned to each book. You are only responsible for the book that you have chosen - [make your choice here](#). As a group you will pick a time to meet and discuss the book outside of class and then individually write a critical response to the book prior to our in-class meetings to discuss the topics together. The due date for this response is labeled BCR below.

**Are We Still a Eugenic Society? Project:** You will integrate perspectives from multiple disciplines to write two opposing essays. One version will ask you to support the argument that we currently live in a eugenic society. The second version will ask you to support the argument that we do not currently live in a eugenic society. You will then choose what you feel is the strongest of your two arguments and put together a pecha kucha style-presentation given on the last two days of class.

## Attendance

Because this class is a group learning experience, your contributions to each class meeting will be essential. For that reason, I expect you to attend all class meetings—which includes showing up on time and remaining until class is over. You are responsible for all the work we do on the day of your absence.

"Babies with genetic disease are often born to healthy parents. The Counsyl Test gives you insight to a healthy future."

[www.counsyl.com](http://www.counsyl.com)

## Course Meetings

### Module 1: Course Introduction and Assignments

- 1/8 Genetics and the Good Society: An Introduction
- 1/10 Syllabus Questions and Genetics Primer

### Module 2: Jar City, BioBanks, and DNA Databases

- 1/15 Jar City Discussion Day I (RR)
- 1/17 Jar City Discussion Day II (RR)
- 1/22 Genealogy, Consent, and Crime (RR)
- 1/24 23andMe Ancestry DNA Testing Kits (AR)

### Module 3: Country-Based Genome Initiatives

- 1/29 Genome Initiatives I - Pick a Country (RR)
- 1/31 Genome Initiatives II - Program Analysis (RR)
- 2/5 Genome Initiatives III - Research Findings (RR)
- 2/7 Diversity and Genome Initiatives (RR)
- 2/12 GINA, Genomic Information, and Genetic Privacy (RR)
- 2/14 Personalized Medicine - Hope or Hype? (RR)

### Module 4: Eugenics and the History of Human Genetics

- 2/19 Eugenics - Looking Back - Charles Davenport Reading (RR)
- 2/21 Stories of American Eugenics - Mental Illness (RR)
- 2/26 Stories of American Eugenics - Immigration (RR)
- 2/28 Stories of American Eugenics - Control of Reproduction (RR)
- 3/5 Stories of American Eugenics - Race (RR)

### Module 5: Genetics and Identity

- 3/7 Genetics and Identity - 23andMe Results (AR)
- 3/12 Genetics and Identity - White Supremacy Movements (RR)
- 3/14 Genetics and Identity - The African American Experience (RR)

### Module 5: Reproductive Technologies

- 3/26 Reproductive Technologies I - Genetic Testing and Embryo Selection (RR)
- 3/28 Reproductive Technologies II - Germline Modification (RR)

### Module 6: What is a Good Life?

- 4/2 Genetics and Disability Book Club I (BCR)
- 4/4 Genetics and Disability Book Club II (RR)

### Module 7: Sociogenomics - The New Eugenics?

- 4/9 Genetics and Education (RR)
- 4/11 Robert Plomin vs Nathaniel Comfort (RR)

### Modern Eugenics Pecha Kucha Presentations

“The peculiar drama of my life has placed me in a world that by and large thinks it would be better if people like me did not exist. My fight has been for accommodation, the world to me, and me to the world.”

Harriet McBryde Johnson

- 4/16 Are we still a Eugenic Society?
- 4/18 Are we still a Eugenic Society?

## Honor Code and Academic Integrity

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student's actions are related more to a misunderstanding will be handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student's file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student's transcript for two years after which the student may petition for the X to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration--working together without permission-- is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others' exams, fabricating data, and giving unauthorized assistance. Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete [Honor Code and all related processes in the Student Handbook](#).