

# **BILD 60 - Fall 2022**

## **Diversity, Equity, and Inclusion in Relation to Human Biology**

**Professor:** Dr. LaTisha Hammond (she/her)

**Email:** [lhammond@ucsd.edu](mailto:lhammond@ucsd.edu)

**Office:** TBD

**Office Hours:** W 1:30 – 2:30 (Zoom only), Th 1 – 2pm (hybrid), or by appointment

W link: <https://ucsd.zoom.us/j/98707208373>

Th link: <https://ucsd.zoom.us/j/99392867571>

**Class Times:** Tu/Th: 11:00 – 12:20pm

**Class location:** RWAC 0103

**Graduate Instructional Assistant:** Hema Kopalle (she/her)

**Email:** [hkopalle@ucsd.edu](mailto:hkopalle@ucsd.edu)

**Office hours:** TBD

**Sections:**

A01: M, 8 – 8:50am

A02: M, 6 – 6:50pm

### **Course Description**

In this course, we will examine diversity, equity, and inclusion in the context of biology from a variety of perspectives. We will consider the underlying biological frameworks of various matters such as race, sex, and gender. We will begin with a brief history of the concept of race in biology from scientific and medical perspectives, and discuss how science and biology have been used to discriminate against specific human groups (e.g. Indigenous and Black folks in the US). Next, we will consider the biology of sex, notions of gender, and the ways in which assumptions about each can and have influenced the types of research done in those areas, and how, in turn, those results impact societal notions of sex, gender, and sexuality. Afterward we will consider biological case studies of the intersections of various social identities and how those identities impact, or are impacted, by underlying biological assumptions. The goal is to challenge students to critically evaluate the relationships between human biology, gender, race, and science to garner a better understanding of current issues related to the intersection of these aspects as they relate to matters of diversity, equity, and inclusion in society.

### **Course Principles**

By its very nature, this course will include readings, presentations and discussions on difficult topics that affect human relations and feelings. Mutual respect and sensitivity are essential, as well as the strong consideration of privacy and tolerance. The classroom should be experienced as a “safe zone”, where participation, conversation and discussion lead to learning and understanding, not to confrontation. Adherence to these Principles is a requirement.

### **Course Objectives and Learning Outcomes:**

By the end of this course students will be able to:

- Understand the ways in which race and gender are socially constructed
- Identify and evaluate the limits to biological and social constructions of race and gender
- Recognize and critique forms of scientific and social bias in both scientific studies and social uses of science
- Understand scientific method and experimental design as they relate to biological studies that influence social perceptions of race, gender, etc.

- Recognize and evaluate the ways in which science impacts people’s lives
- Communicate effectively and respectfully with others
- Constructively reflect on assignments and other coursework
- Identify appropriate sources and resources needed for research and learning

## Course Format

This course (lecture and discussion section) will meet in-person. There will be a few days in the quarter that may be remote, either synchronous or asynchronous. These days will be noted in advance on the syllabus. In the instance of a sudden absence on my part, you will be notified as soon as possible regarding the temporary change in modality via Canvas.

## Assessment of Learning

### 1. Attendance, Participation, and Collaborative Group Work

Attendance and participation in the course are highly valued, as they will give you opportunities to discuss and work through the various concepts we will cover. You will regularly work collaboratively with others for the purposes of sharing knowledge, discussing and making sense of the information, and developing problem-solving skills as you apply your knowledge to real-world problems.

### 2. Assignments

There will be various assignments during the course, ranging from reflection journal assignments to reading analyses and critiques. The purpose of these assignments is to not only keep you up to date on the reading, but to provide you opportunities to make sense of the various texts we will read and their larger contexts.

### 3. Short Papers

There will be two short analysis papers to assess your understanding of the core concepts we have covered, and to determine how well you can apply those concepts and principles to novel, societal problems and scenarios.

### 4. Final Project

For your final project you will be required to develop a research proposal on some intersecting aspect of human biology and DEI that is of interest to you. The project will require you to draw on what you have learned in the course and apply that knowledge to the development of an experiment and research proposal that will address a DEI-related issue. The purpose is to allow you to extend what you have learned outside the class and place various concepts into practice. More details about this project will be given midway through the quarter. The project includes a **written research proposal draft, a peer review, and a presentation of the finalized proposal.**

### 5. Reflection paper + Final Grade Proposal

After your final project is completed, you will write a short reflection paper on what you have learned and your major takeaways from the course. You will then propose the grade you feel you have earned in the course with evidence and justifications. In the event that there is a significant discrepancy between your proposed grade and what the work/effort actually demonstrates, I (the instructor) reserve the right to override your proposed grade and make

the necessary adjustments. More details on the grade proposal will be provided later in the quarter.

## Evaluation of Learning

This course will focus on qualitative feedback instead of quantitative. Most of the work in this class that is assessed by the instructional team will be assessed with written feedback (in the form of asking questions or comments) or using a pared-down assessment scale of strong/satisfactory/unsatisfactory. For other work, you will be assessing yourself, or the work of your peers. This means that I will not be assigning point values or placing letter grades on most of what you complete in this course. In doing so, you will have to reflect on your work. At the end of the course, you will be reflecting on, and evaluating your overall work in the course, and submitting a final grade proposal to me. The goal of this type of assessment is to have you focus on the quality of your work throughout the course, and on your overall learning, i.e. are you working hard to understand the concepts we cover? Are you working hard to get a specific, desired grade? Both? Just one? What does the desired grade mean for you? I ask those questions not as a judgement, but as a point of reflection. Now, if this process causes more stress than it alleviates, please see me at any point to discuss your progress. If you are worried about your grade, your best strategy should be to do the readings/viewings, attend lecture, attend discussion section, participate in the discussions, and complete the assignments. The list below is what you and I will be considering regarding the final grade.

- Attendance, Participation, and collaborative group work
- Assignments
- Short Papers (2)
- Project draft and peer review
- Final Project Presentation
- Reflection Paper

Your final letter grade will be based on the following breakdown:

90%+	A-/A
80%+	B-/B/B+
70%+	C-/C/C+
60%+	D-/D/D+
<60%	F

## Course Materials

### Texts, Readings, and other materials

The format of the class will mainly be discussion format and will require you to have some familiarity with the material being covered that day. As such, assigned readings and viewings must be completed BEFORE class. The required readings for the class are as follows:

#### *Books*

Ruha Benjamin. 2013. People's Science: Bodies and Rights on the Stem Cell Frontier.

#### *Journal Articles*

The bulk of the readings in this course will be journal articles. Required journal articles and other short readings will be posted to Canvas in the weekly modules (either as pdfs, or links to the pdfs). See the Schedule of Readings below for more details.

## Technology requirements and platforms

You will need a computer with access to the internet for this class.

*Canvas:* <https://Canvas.UCSD.edu/>. All assignments will be posted on, and must be submitted through, Canvas. Assessments of learning and grades will also be posted on Canvas only.

*Zoom:* Whole-class synchronous sessions (if need be) will be held on Zoom (accessible through Canvas)

*Perusall* – accessible through Canvas, Perusall is a collaborative annotation software that we be used for asynchronous discussions of some readings.

## **Course Policies**

### ***Attendance and Participation***

Attendance will not be formally recorded, and absences will not be deducted from your final grade, per se. The focus here will be on participation. I will not be assigning points for participation, and you will know best the degree to which you need to participate to support your learning, but I will notice who is engaging and who is not. Engaging with the material, and with the community of the class, will benefit your learning, and therefore my hope is that you will make use of those opportunities. I also understand that life happens, things come up, and there is a pandemic happening, so there may be times when you are not able to participate, or participate fully. Please let me know if this is the case. **In instances of illness, minor or major, or COVID-19 infection, please do let me and the IA know when you are able, so that we can strategize the best way to move forward regarding coursework and participation.** At the end of the course I will ask you to assess your attendance and overall participation as part of your self-assessment.

### ***Assignments, Papers, and Projects***

Unless I state otherwise, all assignments should be typed. All assignments should be submitted, via Canvas, by the due date. **Late assignments and papers will be accepted for full credit up until Friday, Nov. 18 (week 9).** The purpose of the assignments is to give you practice and additional exposure to the content to aid in your learning, and they coincide with the timing of course topics. So, **it is in your best interest to submit your assignments by the due date, especially so you can receive important feedback about your understanding and progress.** However, life happens and issues arise (whether it be issues pertaining to physical health, mental health, emotional health, work schedules, caregiving responsibilities, etc.), and sometimes it is not possible to get work in by the due date. Therefore, points will not be deducted for late work. However, because there is a lot of grading that takes place in this course, **late work will take longer to be returned to you**, as other on-time work is graded with the pace of course content to provide timely feedback. Also, **late work is much less likely to receive detailed feedback (if at all) given the bulk of grading for the course, and out of respect for the IA,** given their own workload. So, please be aware of this when you need to submit late work.

**All final project components (topic selection, peer reviews, presentation, and reflection paper), however, must be completed and submitted by the due dates given.**

**Make-up assignments** will not be given because you have until week 9 to submit late assignments.

### ***Assignment Collaboration Policy and Academic Integrity***

Discussing course material and forming study groups is encouraged. Working with other students while you complete your assignments in a study capacity is also ok. **HOWEVER, all individual work that is turned in should be of individual effort, meaning that all written work should be *in your own words of your own effort*.** Assignments demonstrating improper or excess collaboration may result in Integrity Code violation charges (see below in UC San Diego Policy on Integrity of Scholarship) and zero credit. The minimum penalty for academic dishonesty is to receive a zero on the assignment. Collaboration on papers is not allowed. Academic dishonesty on papers will result in receiving a zero on the paper. Major offenses will result in a failure of the course.

### ***Technology during synchronous sessions***

During discussions with the whole class, or with your groups, please refrain from using social media or other un-related tasks so that you can engage with the instructional team and your peers respectfully.

### **Communication**

#### *Communicating with instructor*

Communicating with me is very important. Please utilize office hours. If you absolutely cannot make those times, please email me so an alternate time can be set up. However, attending office hours is suggested and preferred. I will respond to emails by 4pm, M-F. Emails received after that time will be responded to the following weekday unless otherwise stated by me. I am not available for immediate responses late in the evenings or on weekends unless otherwise stated. In terms of email conduct, emails should be polite and professional, with proper salutations (e.g. Dear Dr. Hammond or Hi Prof. Hammond), and with your name at the end.

#### *Instructor communications with you*

Whole-class announcements will be made via Canvas, so please check Canvas regularly for these announcements. Urgent class announcements will be sent directly to your UCSD email address.

### **Diversity, Equity, Inclusion Statement**

Equity and justice provide the foundation for everything I do, from what I teach, how I teach, and how I move through the world. It is of utmost importance to me to ensure that the classroom space (in person and online) is one that fosters open, equitable, and safe dialogue and discussion. A diversity of perspectives and voices is critical to learning and living. Also, differing intersectional identities and privileges impact the learning space, and the discussions and collaborations that happen within. Given this, it is important to me to ensure there is equity in our learning spaces. Disagreements may arise and are sometimes necessary. However, not all disagreements are grounded in equity and thus, not entitled to the class space. As Robert Jones Jr. says: *"We can disagree and still love each other unless your disagreement is rooted in my oppression and denial of my humanity and right to exist."* As such, I feel it is imperative to ensure that what happens in the classroom supports diversity and minoritized identities, voices, and experiences, and that the class activities are not at the expense of anyone in the space.

### **Campus Policies**

- [UC San Diego Principles of Community](#)
- [UC San Diego Policy on Integrity of Scholarship](#)
- [Religious Accommodation](#)
- [Nondiscrimination and Harassment](#)
- [UC San Diego Student Conduct Code](#)

## Resources for Support and Learning

Learning and Academic Support	
<p><b><a href="#">Ask a Librarian: Library Support</a></b>  <i>Chat or make an appointment with a librarian to focus on your research needs</i></p> <p><b><a href="#">Course Reserves, Connecting from Off-Campus and Research Support</a></b>  <i>Find supplemental course materials</i></p> <p><b><a href="#">First Gen Student Success Coaching Program</a></b>  <i>Peer mentor program that provides students with information, resources, and support in meeting their goals</i></p> <p><b><a href="#">Office of Academic Support &amp; Instructional Services (OASIS)</a></b>  <i>Intellectual and personal development support</i></p>	<p><b><a href="#">Writing Hub Services in the Teaching + Learning Commons</a></b>  <i>One-on-one online writing tutoring and workshops on key writing topics</i></p> <p><b><a href="#">Supplemental Instruction</a></b>  <i>Peer-assisted study sessions through the Academic Achievement Hub to improve success in historically challenging courses</i></p> <p><b><a href="#">Tutoring – Content</a></b>  <i>Drop-in and online tutoring through the Academic Achievement Hub</i></p> <p><b><a href="#">Tutoring – Learning Strategies</a></b>  <i>Address learning challenges with a metacognitive approach</i></p>
Support for Well-being and Inclusion	
<p><b><a href="#">Basic Needs at UCSD</a></b>  <i>Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live is encouraged to contact: <a href="mailto:foodpantry@ucsd.edu">foodpantry@ucsd.edu</a>   <a href="mailto:basicneeds@ucsd.edu">basicneeds@ucsd.edu</a>   (858) 246-2632</i></p> <p><b><a href="#">Counseling and Psychological Services</a></b>  <i>Confidential counseling and consultations for psychiatric service and mental health programming</i></p>	<p><b><a href="#">Community and Resource Centers Office of Equity, Diversity, and Inclusion</a></b>  <i>As part of the <a href="#">Office of Equity, Diversity, and Inclusion</a> the campus community centers provide programs and resources for students and contribute toward the evolution of a socially just campus            (858).822-.3542   <a href="mailto:diversity@ucsd.edu">diversity@ucsd.edu</a></i></p> <p><b><a href="#">Get Involved</a></b>  <i>Student organizations, clubs, service opportunities, and many other ways to connect with others on campus</i></p>

<p><a href="#"><u>Triton Concern Line</u></a> <i>Report students of concern: (858) 246-1111</i></p> <p><a href="#"><u>Office for Students with Disabilities (OSD)</u></a> <i>Supports students with disabilities and accessibility across campus</i></p>	<p><a href="#"><u>Undocumented Student Services</u></a> <i>Programs and services are designed to help students overcome obstacles that arise from their immigration status and support them through personal and academic excellence</i></p>
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\*\*Please note: This syllabus is subject to change, particularly because of campus efforts to contain COVID-19. Any schedule changes will be posted on Canvas. Make sure to frequently check Canvas to keep updated.

## Schedule of Readings and Assignments: (schedule is subject to change)

### Day Date Readings and Assignments

#### **Week 1: Introductions**

- Th Sep 22 • Introduction; Intersectionality; Objectivity vs. Subjectivity

#### **Week 2: Race in the early days of modern science**

- Tu Sep 27 • Cartwright 1851; Report on the diseases and physical peculiarities of the negro race.  
• Matthews 1887a; Consumption Among Indians. *New York Medical Journal*. 46: 1-3
- Th Sep 29 • Dobzhansky, T. 1941. The race concept in biology. *Scientific Monthly* 52, 2:161-165.  
• Livingstone, F. B. and T. Dobzhansky. 1962. On the non-existence of human races. *Current Anthropology* 3, 3:279-281  
**\*\*Due: Journal Assignment #1**

#### **Week 3: What is race?**

- Tu Oct 4 • Risch et al. 2002. Categorization of humans in biomedical research: Genes, race, and disease. *Genome Biology* 3, 7:1-12
- Th Oct 6 • TallBear 2007. Narratives of race and indigeneity in the Genographic Project. *The Journal of Law, Medicine & Ethics*, 35(3), 414-424  
**\*\*Due: Journal Assignment #2**

#### **Week 4: Sex, Gender, and Sexuality**

- Tu Oct 11 • Fausto-Sterling. 2012. ch. 3: Of Molecules and Sex. 12-26. in *Sex/Gender: Biology in a Social World*  
**\*\*Due: Short paper #1**
- Th Oct 13 • Fausto-Sterling. 2012. ch. 5: Am I a Boy or a Girl? – The emergence of gender identity. 43-69. in *Sex/Gender: Biology in a Social World*.  
• Spencer et al 2021. Prenatal androgen exposure and children's gender-typed behavior and toy and playmate preferences. *Hormones and Behavior* 127(2021):1-9.

#### **Week 5: Sex, Gender, and Sexuality**

- Tu Oct 18 • Morland 2011: Intersex treatment and the promise of trauma. 147-163. in *Gender and the Science of Difference*. in Fisher 2011. ch. 8
- Th Oct 20 **NO CLASS – Reading day**  
• Spanier and Horowitz 2011: Looking for Difference? Methodology is in the eye of the beholder. 43-66. in *Gender and the Science of Difference*. in Fisher 2011. ch. 3  
**\*\*Due: Journal Assignment #3**

#### **Week 6: Case studies in science, race, sex, gender, and bodies**

- Tu Oct 25 • (optional) Eliot et al. 2021. Dump the “dimorphism”: Comprehensive synthesis of human brain studies reveals few male-female differences beyond size. *Neuroscience and Biobehavioral Reviews*. 125(2021):667-697.
- Th Oct 27 • Benjamin 2013. ch. 1

#### **Week 7: Case studies in science, race, sex, gender, and bodies**

- Tu Nov 1 • Benjamin 2013. ch. 2 – 3  
**\*\*Due: Short paper #2**
- Th Nov 3 • Benjamin 2013. ch. 4 – 5

#### **Week 8: Case studies: Race/Sex/Gender as it relates to Reproductive Health**

- Tu Nov 8
- Bailey 2016. Misogynoir in Medical Media: On Caster Semenya and R. Kelly. *Catalyst: Feminist, Theory, Technoscience*. 2. 2:1-31.
  - Dorothy Roberts TED talk 2016. The Problem with Race-Based Medicine [https://www.ted.com/talks/dorothy\\_roberts\\_the\\_problem\\_with\\_race\\_based\\_medicine?language=en](https://www.ted.com/talks/dorothy_roberts_the_problem_with_race_based_medicine?language=en)
- \*\*Due: Journal Assignment #4**

- Th Nov 10 **NO CLASS – Reading day**
- Junod and Marks. 2002. The Approval of the First Oral Contraceptive Pill in the United States and Great Britain. *Journal of the History of Medicine*. 57. 117-160.

**Week 9 Case studies: Race/Sex/Gender as it relates to Reproductive Health**

- Tu Nov 15
- Behre et al. 2016. Efficacy and Safety of an Injectable Combination of Hormonal Contraceptive for Men. *Journal of Clinical Endocrinology and Metabolism*. 101. 12:4779-4788.
  - PBS. The Puerto Rican Pill Trials. [http://www.pbs.org/wgbh/amex/pill/peopleevents/e\\_puertorico.html](http://www.pbs.org/wgbh/amex/pill/peopleevents/e_puertorico.html)
- \*\*Due: In Monday discussion section (Nov. 15): Project drafts for peer review**

- Th Nov 17
- Final presentations

**Week 10: Presentations**

- Tu Nov 22
- Final Presentations
- Th Nov 24 **NO CLASS (Holiday break)**

**Week 11: Presentations and Wrap-up**

- Tu Nov 29
- Final Presentations
- Th Dec 1
- Final Presentations
- \*\*Due: Self and Peer evaluations for group projects**

**Finals Week**

- Th Dec. 7
- \*\*Due: Reflection Paper and Final Grade Proposal (by 2:30pm PT)**