Spring 2021 Society and Genetics Course Offerings

Society and Genetics 88SA: Future of Human Reproduction

<u>Time</u>: Mondays, 5:00pm – 5:50pm

Instructors: Atreyi Mitra (Dr. Michelle Rensel – Instructor on Record)

Remote Format: Online – Synchronous

Description: Seminar, one hour. Examination of ethical, philosophical, and legal questions of contemporary and future forms of assisted reproductive technologies (ARTs) by discussing some of most controversial applications in field. Topics of critical inquiry include number of embryos transferred each in vitro fertilization (IVF) cycle; legalization of traditional surrogacy; creation of donor sibling; selection for disability; posthumous reproduction; preservation of fertility for postmenopausal individuals; fate of frozen embryos; embryonic cloning; and in vitro gametogenesis (IVG). Through academic inquiries and case studies, students are challenged to assess implications of emerging reproductive technologies, to decide to what extent they should be regulated, and to imagine what those regulations would feasibly look like. P/NP grading. Facilitated by Atreyi Mitra, with Michelle A. Rensel as faculty mentor.

Notes: Course is open for enrollment to all UCLA students.

Society and Genetics 88SB: Going Viral: HIV/AIDS in Social, Biological, and Political Contexts

Time: Wednesdays, 1:00pm – 1:50pm

Instructors: Sarah Sullivan (Dr. Michelle Rensel – Instructor on Record)

Remote Format: Online – Synchronous

<u>Description</u>: Seminar, one hour. Exploration of social, political, cultural, and biological underpinnings of HIV and AIDS epidemic. Incorporates discussions of racial and socioeconomic inequities and stigma surrounding lesbian, gay, bisexual, transgender, queer and other identities from medical and public health perspectives. P/NP grading. Facilitated by Sarah Sullivan, with Michelle Rensel as faculty mentor.

Notes: Course is open for enrollment to all UCLA students.

Society and Genetics 88SC: Ethical Change-Making: Guiding Social Movements on Social Media

Time: Tuesdays, 6:00pm – 6:50pm

Instructors: Nathan Tran (Dr. Nicholas Shapiro – Instructor on Record)

Remote Format: Online – Synchronous

Description: Seminar, one hour. Exploration of how change-making frameworks and theories produce varying results in social change. Development of understanding of how to challenge systems of oppression through lenses of social responsibility, counterculture, reform, and contestation. Critical analysis of Arab Spring, Kony 2012, and Black Lives Matter to evaluate utility of various social media platforms in advocacy and accompliceship. Students apply concepts discussed to make change in personally meaningful social issue within their own network. P/NP grading. Facilitated by Nathan Tran, with Nicholas E. Shapiro as faculty mentor.

Notes: Course is open for enrollment to all UCLA students.

Society and Genetics 102: Societal and Medical Issues in Human Genetics

Time: Tuesdays & Thursday, 12:30pm – 1:45pm

Instructor: Michelle Rensel

Remote Format: Online – Recorded (Lecture)/Online-Synchronous (Discussions)

<u>Description</u>: (Formerly numbered M102.) Lecture, three hours; discussion, two hours. Sequence of entire human genome is now known. Consideration of how this knowledge impacts concepts of ourselves as individuals and of our place in biological universe, concepts of race/ethnicity and gender, ability of DNA-based forensics to identify specific individuals, ownership and commodification of genes, issues of privacy and confidentiality, issues of genetic discrimination, issues of predictive genetic testing. Discussion of human cloning for reproductive and therapeutic purposes. Exposure to medical genetics cases. Discussion of role of whole genome sequencing in clinical setting. Human Genome Project influence on medicine and on our concepts of self and identity. Letter grading.

<u>Notes</u>: This course will be restricted to Human Biology and Society (B.A. & B.S.) majors and Society and Genetics minor students during first two open windows of enrollment for Spring 2021. Course will open up to UCLA students of junior standing or above starting *February 25,* **2021**. For *HBS (BA) majors,* Society and Genetics 102 is the course that substitutes for Society and Genetics 101. For *Society and Genetics minors,* I will include notes regarding Soc Gen courses that can cover Society and Genetics 101 for Path A.

Society and Genetics 105B: Problems of Identity at Biology/Society Interface

Time: Tuesdays & Thursdays, 9:30am – 10:45am

Instructor: Jessica Lynch

Remote Format: Online – Recorded (Lecture)/Online-Synchronous (Discussions)

<u>Description</u>: Lecture, three hours; discussion, one hour. *Requisites*: course 101 or Anthropology 1, or Life Sciences 4 and 23L, or 7C (each may be taken concurrently). Course 105A is not requisite to 105B. Exploration of problems of human identity that are inherently biological and social. Topics vary and may include race, obesity and nutrition, autism, deafness or disability, gender, intelligence, or sexuality. Topics contain set of intertwined problems so complex, so difficult to define, and so wrapped up in conceptions of what it is to be human, that it has spawned research from variety of perspectives in biological and human sciences. Students critically engage various intellectual perspectives--some competing, some complementary--that intersect on one particular topic. Examination of how researchers from social/historical and biological sciences construct topic as intellectual problem, methods they bring to bear on it, and findings they have produced. Letter grading.

<u>Notes</u>: This course will be restricted to Human Biology and Society (B.A. & B.S.) majors during entire Spring enrollment period. The Spring 2021 offering of Soc Gen 105B will be on the topic of **Identity/Addiction** with an expected 60 student enrollment cap.

Society and Genetics 108: Human Biology, Genetics, and Society

Time: Tuesdays & Thursdays, 2:00pm – 3:15pm

Instructor: Christopher Kelty

Remote Format: Online – Synchronous (Lecture)/Online – Synchronous (Discussions)

<u>Description</u>: *Limited to <u>senior</u> Human Biology and Society majors*. Lectures, readings, discussions, and development of collaborative culminating project. Group-based research projects in mapping and staging contemporary controversy at intersections of human biology, genetics, and society. Reading of large amounts of material to make sense of both scientific concepts and social and political issues, with original research project and presentation required. Letter grading.

<u>Notes</u>: This course will be restricted to <u>senior</u> Human Biology and Society (B.A. & B.S.) majors during entire Spring enrollment period. <u>Society and Genetics minors</u> may take this course to substitute Society and Genetics 191S (offered Spring 2021) requirement only with departmental approval. Juniors wishing to take Society and Genetics 108 early (e.g., for early graduation purposes, etc.) should discuss with ISG SAO before enrolling in Society and Genetics 108 prior to senior year. We anticipate having enough seats to accommodate all remaining Class of 2021 seniors that still need to take Society and Genetics 108. Again, HBS major <u>seniors</u>, graduating with Class of 2021, should be the only ones enrolling in this course Spring 2021.

Society and Genetics 141: Nature versus Nurture: Genes and Environment

Time: Mondays & Wednesdays, 11:00am – 12:15pm

Instructor: Patrick Allard

Remote Format: Online – Recorded (Lecture)

<u>Description</u>: Seminar, three hours. Comprehensive and practical examination of emerging science of gene-environment interaction. Discussion of primary components of field, including role of metabolic pathways in modifying environmental responses and importance of environmental influences in human disease. Exploration of selected hot topics in field such as importance of epigenetics and of microbiome. Course is highly useful for further study in medical field or public health. Letter grading.

<u>Notes</u>: This course will be restricted to Human Biology and Society majors and Society and Genetics minors during priority and first enrollment pass. The course will open up to UCLA Juniors and Seniors during second pass enrollment. <u>Society and Genetics minor</u> students may use this course to cover Society and Genetics 101 requirement.

Society and Genetics 146 (New!): Evolution in the Anthropocene

Time: Mondays & Wednesdays, 9:30am – 10:45am

Instructor: Shane Campbell-Staton

Remote Format: Online – Synchronous (Lecture)/Online – Synchronous (Discussions)

<u>Description</u>: The term "evolution" is often associated with pristine far off places, unaltered by the human hand and molded slowly over millennia by a combination of natural selection and pure chance. However, regardless of where we are, evolution is happening right now, in and around us and we have become a major force driving that process. We are altering the course of evolution at an incredible pace across the world and across The Tree of Life. This is the kind of evolution we will study in this class. How are humans engines for evolutionary change? In this class we will explore incredible stories of the surprising, amazing, sometimes heart-breaking ways we are changing life on our planet and how these things turn around and alter who we are: our culture, fashion trends, even the course of human history. In this course, we will explore the footprint that we are leaving on species around the globe, and the astounding ways they have altered their evolutionary course to keep pace with our everchanging influence on the planet.

<u>Notes</u>: This course will be restricted to Human Biology and Society majors and Society and Genetics minors during priority and first enrollment pass. The course will open up to UCLA Juniors and Seniors during second pass enrollment. <u>Society and Genetics minor</u> students may use this course to cover Society and Genetics 101 requirement.

Society and Genetics 163: Science and Popular Movements: Controversy, Conflict, and Collaboration

Time: Tuesdays & Thursdays, 3:30pm – 4:45pm

Instructor: Kushan Dasgupta

Remote Format: Online – Synchronous (Lecture)

Description: Seminar, three hours. Historical and philosophical analysis of myth of separation of science and people. Controversies in genetics and biotechnology, medical research, and environmentalism show examples of popular science where scientists and nonscientists interact in surprising ways: when nonscientists challenge scientists' authority and knowledge, where scientists act like social movement. and where scientists and regular people work together, sometimes cooperatively and sometimes competitively, to generate knowledge. Consideration of some implications and contradictions for politics and knowledge production that emerge from popular science. Letter grading.

<u>Notes</u>: This course will be restricted to Human Biology and Society majors and Society and Genetics minors during priority and first enrollment pass. The course will open up to UCLA Juniors and Seniors during second pass enrollment.

Society and Genetics 174 (New!): What's wrong with Science?

Time: Mondays & Wednesdays, 12:30pm – 1:45pm

Instructor: Aaron Panofsky

Remote Format: Online – Asynchronous (Lecture)/Online – Synchronous (Discussions)

Description: This class will lead students through the tangled issues linking science to the contemporary "post truth" crisis. Drawing on ideas and frameworks from sociology, philosophy, anthropology, political psychology, and science and technology studies we will consider a range of materials including theoretical and empirical academic texts as well as commentaries and documents speaking to current events. The domains we will consider include 1) the demarcation of science from pseudoscience, 2) the conditions turning scientific disagreement into public controversy, 3) science's relationship to different publics and political cultures, 4) crises of trust in contemporary science and efforts to reconstruct scientific integrity, and 5) the weaponization of science and pseudoscience in misinformation campaigns and conspiracy theories. Through engaging these complex matters, students will be better armed to understand and advance productive relationships between science and political life.

<u>Notes</u>: This course will be restricted to Human Biology and Society majors and Society and Genetics minors during priority and first enrollment pass. The course will open up to UCLA Juniors and Seniors during second pass enrollment.

Society and Genetics 180: Special Courses in Society and Genetics: Data in and of Pandemic

Time: Mondays & Wednesdays, 2:00pm – 3:15pm

Instructors: Michael Scroggins

Remote Format: Online – Asynchonous (Lecture)

<u>Description</u>: Taking current pandemic as lens, examination of how scientific data is generated, circulated, analyzed, and archived. Study asks how pandemic data is received and/or contested by policy makers and public. Thematic focus on infrastructure studies, research software, standards and protocols, and scientific labor and practice. Theoretical focus on scientific data, modeling and forecasting, and construction and contestation of scientific authority in data-driven life sciences.

<u>Notes</u>: This course will be restricted to Human Biology and Society majors and Society and Genetics minors during priority and first enrollment pass. The course will open up to UCLA Juniors and Seniors during second pass enrollment.

Society and Genetics 180: Special Courses in Society and Genetics: Materia Medica, Pharmacology, and Bioprospecting

Time: Mondays & Wednesdays & Fridays, 10:00am - 10:50am

Instructors: Chien-Ling Zeleny

Remote Format: Online – Synchronous (Lecture)

<u>Description</u>: Study integrates literature from multiple disciplines to investigate history of collected knowledge about therapeutic properties of any healing substance originated from natural resources. Study accomplished through lens of pharmacological studies and applications in historical contexts across different medical culture from 11th century to modern time. Emphasis on bioprospecting issues of drug discovery, acquisition, testing, and application. These issues include circulation of knowledge in translation, collection, and classification; development in colonial and postcolonial contexts; and emergence of scientific pharmacology, ethnobotany, and ethnopharmacology.

<u>Notes</u>: This course will be restricted to Human Biology and Society majors and Society and Genetics minors during priority and first enrollment pass. The course will open up to UCLA Juniors and Seniors during second pass enrollment.

Society and Genetics 188: Special Courses in Society and Genetics: Where is the Love? Love and Sex in Science and Society

Time: Tuesdays & Thursdays, 11:00am – 12:15pm

Instructors: Sally Gibbons

Remote Format: Online – Synchronous (Lecture)

<u>Description</u>: Perhaps no topic has been more discussed and dissected by screenwriters, poets, novelists, and journalers--not to mention aging rockers--than romantic love. But in social and natural sciences, romantic love is often reduced or (re)described through appeals to evolution, mating strategies, parenting, neuron firing, hormones, and sex markets. Consideration of work of philosophers who have written about love and sex, situating their work in relation to recent accounts drawn from sociology, psychology, anthropology, and neurobiology. Study asks what might count as ethical relations between lover and beloved and between sex partners, exploring ways culture shapes desires, bodies, and relationships. Investigation of way technology is changing attitudes and approaches to love and sex, taking up variety of contemporary ethical debates, including those about marriage, rape, pornography, and prostitution.

<u>Notes</u>: This course will be restricted to Human Biology and Society majors and Society and Genetics minors during priority and first enrollment pass. The course will open up to UCLA Juniors and Seniors during second pass enrollment.

Society and Genetics 191S: Capstone Seminar: Society and Genetics

Time: Thursdays, 2:00pm – 5:00pm

Instructors: Soraya de Chadarevian

<u>Remote Format</u>: Online – Synchronous (Lecture)

<u>Description</u>: Seminar, three hours. Enforced requisites: courses 101 (or Life Sciences 4), M102. Discussion of genetics and society from historical perspective. How science of genetics itself is deeply social. Study of how biologists and anthropologists have conceptualized relations of genes and (social) environment. Reading of accounts of human nature, human flourishing, and dignity that seem to privilege nature as something that can guide ethical thought and action. How these accounts would encourage or discourage people from manipulating their genetic inheritance. Consideration of what is new in new genetics. Current discussions of promise and peril of genetics in relation to society. Culminating paper required. May be repeated once for credit with topic change. Letter grading.

<u>Notes</u>: This course will be restricted to Society and Genetics minors during entire Spring enrollment period. This course is meant to be taken by graduating Seniors in the Society and Genetics minor program.